PB 151366

NBS

Technical Note

N°. 7

LOW- AND VERY LOW-RADIOFREQUENCY TABLES OF GROUND WAVE PARAMETERS FOR THE SPHERICAL EARTH THEORY: THE ROOTS OF RICCATI'S DIFFERENTIAL EQUATION

(SUPPLEMENTARY NUMERICAL DATA FOR NBS CIRCULAR 573)

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The work described in this Technical Note was sponsored by Air Force Cambridge Research Center, Air Research and Development Command, CSO & A No. 58-28(AFCRC)

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LOW- AND VERY LOW-RADIOFREQUENCY TABLES OF GROUND WAVE PARAMETERS FOR THE SPHERICAL EARTH THEORY: THE ROOTS OF RICCATI'S DIFFERENTIAL EQUATION

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ABSTRACT

The roots of Riccati's differential equation are tabulated in detail throughout the low- and very low-radiofrequency part of the spectrum. The zeroes and certain other parameters used in the calculation of the amplitude and phase of the ground wave by the rigorous series of residues are also tabulated. This paper supplements NBS Circular 573.

Theory

The calculation of the amplitude and phase of the radio-frequency ground wave has been discussed in detail[1]. Perhaps, the most tedious part of this calculation is the determination of the zeroes of a series of residues which constitute the roots of an equation representing the "Hankel approximation[2],"

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1 J. R. Johler, W. J. Kellar, L. C. Walters, "Phase of the Low Radiofrequency Ground Wave," Natl. Bur. of Stds. Circular 573, March 14, 1956.

2 B. Van der Pol and H. Bremmer, "The Propagation of Radio Waves Over a Finitely Conducting Spherical Earth," Phil. Mag. S. 7, Vol. 25, No. 171. Suppl. June 1938, pp. 817-834. See eq. (11b), p. 822.

$$\delta_e = \frac{-1}{\sqrt{-2\,\tau_s}} \; \frac{H^{(1)}_{\frac{1}{3}}\left[\frac{1}{3}\,(-2\,\tau_s)^{\frac{3}{2}}\right]}{H^{(1)}_{\frac{2}{3}}\left[\frac{1}{3}\,(-2\,\tau_s)^{\frac{3}{2}}\right]} \exp\left[\, i\,\frac{\pi}{3}\right] \quad , \qquad (1)$$

where δ_e is a parameter[3] dependent on the conductivity, dielectric constant, and frequency; τ_s is the complex root required for various $s = 1, 2, 3, \ldots$ corresponding to the terms of the residue series[4], and $H^{(1)}_{\frac{1}{3}}(z)$ and $H^{(1)}_{\frac{2}{3}}(z)$ are Hankel functions of the first kind of order $\frac{1}{3}$ and $\frac{2}{3}$, respectively.

In the limit, $\delta_e = \infty$, eq. (1) reduces,

$$H^{(1)}_{\frac{2}{3}}\left[\frac{1}{3}\,(-2\,\tau_s)^{\frac{3}{2}}\right] = 0 \qquad (2)$$

or,

$$J_{\frac{2}{3}}\left[\frac{1}{3}(-2\,\tau_s)^{\frac{3}{2}}\exp(i\pi)\right] - J_{-\frac{2}{3}}\left[\frac{1}{3}\,(-2\,\tau_s)^{\frac{3}{2}}\exp(i\pi)\right] = 0 \quad , \qquad (3)$$

where, $J_{\frac{2}{3}}(z)$ and $J_{-\frac{2}{3}}(z)$ are Bessel functions of order $\frac{2}{3}$ and $-\frac{2}{3}$ respectively. The roots of this equation, $\tau_{s,\infty} = |\tau_{s,\infty}| \exp(i\,\frac{\pi}{3})$ have been tabulated[5], Table 7.

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3 See op. cit. 1, p. 35, eqs. (80, 81, 82).

4 op. cit. 1, p. 5, eq. (27).

5 See op. cit. 1, p. 33, $|\tau_{s,o}|$ and $|\tau_{s,\infty}|$ are given in Table 44 for s = 0 to 49.

Also, in the limit, $\delta_e = 0$, eq. (1) reduces,

$$H^{(1)}_{\frac{1}{3}}\left[\frac{1}{3}(-2\tau_s)^{\frac{3}{2}}\right] = 0 \tag{4}$$

or,

$$J_{\frac{1}{3}}\left[\frac{1}{3}(-2\tau_s)^{\frac{3}{2}}\exp(i\pi)\right] + J_{-\frac{1}{3}}\left[\frac{1}{3}(-2\tau_s)^{\frac{3}{2}}\exp(i\pi)\right] = 0, \tag{5}$$

where, $J_{\frac{1}{3}}(z)$ and $J_{-\frac{1}{3}}(z)$ are Bessel functions of order $\frac{1}{3}$ and $-\frac{1}{3}$. The roots of this equation, $\tau_{s,o} = |\tau_{s,o}| \exp(i\frac{\pi}{3})$ have been tabulated[5], Table 7.

The following derivatives are evident from known properties[6] of Hankel functions:

$$\frac{d}{dz} H^{(1)}_{\frac{1}{3}}(z) = \exp\left[i\frac{2\pi}{3}\right] H^{(1)}_{\frac{2}{3}}(z) - \frac{1}{3z} H^{(1)}_{\frac{1}{3}}(z) \quad , \tag{6}$$

$$\frac{d}{dz} H^{(1)}_{\frac{2}{3}}(z) = \exp\left[i\frac{\pi}{3}\right] H^{(1)}_{\frac{1}{3}}(z) - \frac{2}{3z} H^{(1)}_{\frac{2}{3}}(z) \quad , \tag{7}$$

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6 See G. N. Watson, "A Treatise on the Theory of Bessel Functions," 2nd Ed. Cambridge Univ. Press, 1952, p. 74.

Therefore,

$$\frac{d\delta e}{d\tau_s} = \frac{-1}{(-2\tau_s)^{\frac{3}{2}}} \frac{H^{(1)}_{\frac{1}{3}}\left[\frac{1}{3}(-2\tau_s)^{\frac{3}{2}}\right]}{H^{(1)}_{\frac{2}{3}}\left[\frac{1}{3}(-2\tau_s)^{\frac{3}{2}}\right]} \exp\left(i\frac{\pi}{3}\right)$$

$$-1 + \frac{-1}{(-2\tau_s)^{\frac{3}{2}}} \frac{H^{(1)}_{\frac{1}{3}}\left[\frac{1}{3}(-2\tau_s)^{\frac{3}{2}}\right]}{H^{(1)}_{\frac{2}{3}}\left[\frac{1}{3}(-2\tau_s)^{\frac{3}{2}}\right]} \exp\left(i\frac{\pi}{3}\right)$$

$$+ 2\tau_s \left\{ \frac{-1}{\sqrt{-2\tau_s}} \frac{H^{(1)}_{\frac{1}{3}}\left[\frac{1}{3}(-2\tau_s)^{\frac{3}{2}}\right]}{H^{(1)}_{\frac{2}{3}}\left[\frac{1}{3}(-2\tau_s)^{\frac{3}{2}}\right]} \exp\left(i\frac{\pi}{3}\right) \right\}^2$$

$$+ \frac{2}{(-2\tau_s)^{\frac{3}{2}}} \frac{H^{(1)}_{\frac{1}{3}}\left[\frac{1}{3}(-2\tau_s)^{\frac{3}{2}}\right]}{H^{(1)}_{\frac{2}{3}}\left[\frac{1}{3}(-2\tau_s)^{\frac{3}{2}}\right]} \exp\left(i\frac{\pi}{3}\right) , \tag{8}$$

or, applying eq. (1) again, results in the following differential equation of Riccati[7]:

$$\frac{d\delta e}{d\tau_s} - 2\,\tau_s\,\delta_e^2 + 1 = 0 \quad . \tag{9}$$

---

[7] Ibid. See for example, p. 92.

The roots, τ_s, can now be found by expanding the differential equation (9), in power series of δ_e and $\frac{1}{\delta_e}$ with the following result[8]:

$$\tau_s = \tau_{s,o} - \delta_e - \frac{2}{3}\tau_{s,o}\delta_e^3 + \frac{1}{2}\delta_e^4 - \frac{4}{5}\tau_{s,o}^2\delta_e^5$$

$$+ \frac{14}{9}\tau_{s,o}\delta_e^6 - \frac{1}{7}(5 + 8\tau_{s,o}^3)\delta_e^7 + \frac{58}{15}\tau_{s,o}^2\delta_e^8$$

$$-\left(\frac{328}{81}\tau_{s,o} + \frac{16}{9}\tau_{s,o}^4\right)\delta_e^9 + \left(\frac{423}{315} + \frac{1552}{175}\tau_{s,o}^3\right)\delta_e^{10}$$

$$-\left(\frac{7576}{495}\tau_{s,o}^2 + \frac{32}{11}\tau_{s,o}^5\right)\delta_e^{11} + \ldots$$

$$|\delta_e^2\tau_s| < \frac{1}{2} \quad . \tag{10}$$

$$\tau_s = \tau_{s,\infty} - \left[\frac{1}{2\tau_{s,\infty}}\right]\frac{1}{\delta_e} - \left[\frac{1}{8\tau_{s,\infty}^3}\right]\frac{1}{\delta_e^2}$$

$$-\left[\frac{1}{12\tau_{s,\infty}^2} + \frac{1}{16\tau_{s,\infty}^5}\right]\frac{1}{\delta_e^3} - \left[\frac{7}{96\tau_{s,\infty}^4} + \frac{5}{128\tau_{s,\infty}^7}\right]\frac{1}{\delta_e^4}$$

$$-\left[\frac{1}{40\tau_{s,\infty}^3} + \frac{21}{320\tau_{s,\infty}^6} + \frac{7}{256\tau_{s,\infty}^9}\right]\frac{1}{\delta_e^5}$$

---

8 Op. cit. 1, p. 35, eqs. (86 - 90). The notation following eq. (89) should read: $|\delta_e^2\tau| < \frac{1}{2}$, and the notation following eq. (90) should read: $|\delta_e^2\tau| > \frac{1}{2}$.

$$- \left[\frac{29}{720\tau_{s,\infty}^{5}} + \frac{77}{1280\tau_{s,\infty}^{8}} + \frac{21}{1024\tau_{s,\infty}^{11}} \right] \frac{1}{\delta_e^6}$$

$$- \left[\frac{1}{112\tau_{s,\infty}^{4}} + \frac{19}{360\tau_{s,\infty}^{7}} + \frac{143}{2560\tau_{s,\infty}^{10}} + \frac{33}{2048\tau_{s,\infty}^{13}} \right] \frac{1}{\delta_e^7}$$

$$- \left[\frac{97}{4480\tau_{s,\infty}^{6}} + \frac{163}{2560\tau_{s,\infty}^{9}} + \frac{429}{8192\tau_{s,\infty}^{12}} + \frac{429}{32768\tau_{s,\infty}^{15}} \right] \frac{1}{\delta_e^8}$$

$$- \left[\frac{1}{288\tau_{s,\infty}^{5}} + \frac{13661}{362880\tau_{s,\infty}^{8}} + \frac{6769}{92160\tau_{s,\infty}^{11}} + \frac{2431}{49152\tau_{s,\infty}^{14}} \right.$$

$$\left. + \frac{715}{65536\tau_{s,\infty}^{17}} \right] \frac{1}{\delta_e^9} - \left[\frac{2309}{201600\tau_{s,\infty}^{7}} + \frac{820573}{14515200\tau_{s,\infty}^{10}} \right.$$

$$\left. + \frac{37961}{460800\tau_{s,\infty}^{13}} + \frac{46189}{983040\tau_{s,\infty}^{16}} + \frac{2431}{262144\tau_{s,\infty}^{19}} \right] \frac{1}{\delta_e^{10}} + \cdots$$

$$\left| \delta_e^2 \tau_s \right| > \frac{1}{2} \quad . \tag{11}$$

The results of the calculations at low- and very-low radio-frequencies are presented, Tables 16 to 40, and 49 to 73. The parameter, δ_e, where,

$$\delta_e = K_e \exp i \left[\frac{3\pi}{4} - \psi_e \right] \quad ,$$

is presented, Tables 1 to 6. The parameter $\lfloor \delta_e^{\,2} \tau_s \rfloor$ is also presented, Tables 7 to 15 and 41 to 47. Additional values of the limiting roots, $\tau_{s,o}$ and $\tau_{s,\infty}$, Table 7, can be readily calculated as follows[9]:

$$\tau_{s,o} = \frac{y_1^{\frac{2}{3}}}{2^{\frac{1}{3}}} \left[1 + \frac{5}{48\, y_1^{2}} - \frac{5}{36\, y_1^{4}} + \frac{77125}{82944\, y_1^{6}} - \frac{108056875}{6967296\, y_1^{8}} + \frac{162375596875}{334430208\, y_1^{10}} - \dots \right] \tag{12}$$

$$\tau_{s,\infty} = \frac{y_2^{\frac{2}{3}}}{2^{\frac{1}{3}}} \left[1 - \frac{7}{48\, y_2^{2}} + \frac{35}{288\, y_2^{4}} - \frac{181223}{207360\, y_2^{6}} + \frac{18683371}{1244160\, y_2^{8}} - \frac{91145884361}{191102976\, y_2^{10}} + \dots \right] , \tag{13}$$

where,

$$y_1 = \frac{3\pi}{8} (4s + 3) \tag{14}$$

$$y_2 = \frac{3\pi}{8} (4s + 1) \quad . \tag{15}$$

---

9 J. C. P. Miller, "The Airy Integral," Math. Tables. Part-Vol. B, Univ. Press, Cambridge, 1946, p. B-48.

With the aid of the roots, τ_s, it is not very difficult to calculate the amplitude, $|E_r|$, and the phase, Arg $E_r = \phi_c$, of the ground wave[10]. It should be noted, however, that a large number of terms, s, are required at very low frequencies and short distances as a result of the slow convergence of the series of residues.

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[10] Op. cit. See eqs. (26, 27) p. 5 or eq. (78), p. 34.

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---

† α is a factor which accounts for vertical lapse of permittivity of the earth's atmosphere. See op. cit. 1. α = 0.75. The integer to the right of each table entry, if present, indicates a power of the factor by 10 by which the number is multiplied, thus positioning the decimal point. For example, 8.8511589 -1 = 0.88511589.

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Table 1.

$\alpha = 0.75$
$\epsilon_2 = 15$

f kilocycles	$\sigma = 5$ K_e		ψ_e	$\sigma = 0.002$ K_e		ψ_e
0.1	1.1478289	4	8.9000000 - 9	2.2956579	2	2.2253550 - 5
0.2	6.4419718	3	1.7805000 - 8	1.2883943	2	4.4507095 - 5
0.5	3.0019409	3	4.4510000 - 8	6.0038819	1	1.1126774 - 4
1	1.6847824	3	8.9010000 - 8	3.3695648	1	2.2250500 - 4
2	9.4555215	2	1.7803000 - 7	1.8911046	1	4.4510500 - 4
3	6.7443914	2	2.6704000 - 7	1.3488789	1	6.6762000 - 4
4	5.3067323	2	3.5606000 - 7	1.0613473	1	8.9010000 - 4
5	4.4062467	2	4.4507000 - 7	8.8125041		1.1126950 - 3
6	3.7851616	2	5.3409000 - 7	7.5703363		1.3352050 - 3
7	3.3288593	2	6.2309500 - 7	6.6577347		1.5577900 - 3
8	2.9783026	2	7.1211500 - 7	5.9566242		1.7802700 - 3
9	2.6998629	2	8.0112500 - 7	5.3997473		2.0027800 - 3
10	2.4729223	2	8.9014500 - 7	4.9458687		2.2253700 - 3
20	1.3878807	2	1.7802850 - 6	2.7758160		4.4505550 - 3
30	9.8994129	1	2.6704300 - 6	1.9799701		6.6756500 - 3
50	6.4674858	1	4.4507100 - 6	1.2936561		1.1124945 - 2
60	5.5558573	1	5.3408500 - 6	1.1113679		1.3349070 - 2
70	4.8860969	1	6.2309950 - 6	9.7745461 - 1		1.5572530 - 2
80	4.3715501	1	7.1211300 - 6	8.7458485 - 1		1.7795510 - 2
90	3.9628569	1	8.0112750 - 6	7.9288662 - 1		2.0017755 - 2
100	3.6297538	1	8.9014250 - 6	7.2630716 - 1		2.2239160 - 2
200	2.0371304	1	1.7802835 - 5	4.0822454 - 1		4.4392645 - 2
300	1.4530351	1	2.6704260 - 5	2.9188396 - 1		6.6376540 - 2
400	1.1433007	1	3.5605675 - 5	2.3043765 - 1		8.8110930 - 2
500	9.4929707		4.4507095 - 5	1.9215119 - 1		1.0952082 - 1
600	8.1548832		5.3408520 - 5	1.6591149 - 1		1.3053851 - 1
700	7.1718099		6.2309930 - 5	1.4677519 - 1		1.5110352 - 1
800	6.4165583		7.1211360 - 5	1.3219473 - 1		1.7116410 - 1
900	5.8166782		8.0112780 - 5	1.2071795 - 1		1.9067715 - 1
1000	5.3277497		8.9014190 - 5	1.1145388 - 1		2.0960812 - 1
1100	4.9209609		9.7915620 - 5	1.0382412 - 1		2.2793115 - 1
1200	4.5767738		1.0681704 - 4	9.7436126 - 2		2.4562815 - 1
1300	4.2814515		1.1571845 - 4	9.2013738 - 2		2.6268862 - 1
1400	4.0250422		1.2461987 - 4	8.7356804 - 2		2.7910852 - 1
1500	3.8001530		1.3350944 - 4	8.3316594 - 2		2.9488943 - 1
1600	3.6011718		1.4241500 - 4	7.9780248 - 2		3.1003806 - 1
1700	3.4237577		1.5131000 - 4	7.6660529 - 2		3.2456505 - 1
1800	3.2645005		1.6022000 - 4	7.3888999 - 2		3.3848445 - 1
1900	3.1206795		1.6917500 - 4	7.1411148 - 2		3.5181301 - 1
2000	2.9900986		1.7807500 - 4	6.9183096 - 2		3.6456936 - 1
2500	2.4827166		2.2250500 - 4	6.0735873 - 2		4.2049939 - 1
3000	2.1327639		2.6706500 - 4	5.5109000 - 2		4.6531117 - 1
3500	1.8756586		3.1152500 - 4	5.1066504 - 2		5.0146366 - 1
4000	1.6781363		3.5612500 - 4	4.7996612 - 2		5.3095040 - 1
4500	1.5212484		4.0055500 - 4	4.5565587 - 2		5.5529730 - 1
5000	1.3933779		4.4510500 - 4	4.3577281 - 2		5.7564850 - 1
6000	1.1969735		5.3411000 - 4	4.0481528 - 2		6.0757010 - 1
7000	1.0526781		6.2316500 - 4	3.8143398 - 2		6.3132880 - 1
8000	9.4182243 - 1		7.1215500 - 4	3.6286334 - 2		6.4962450 - 1
9000	8.5377215 - 1		8.0120000 - 4	3.4758072 - 2		6.6411170 - 1
10000	7.8200730 - 1		8.9010000 - 4	3.3467098 - 2		6.7584930 - 1

Table 2.

$\alpha = 0.75$
$\epsilon_2 = 15$

f kilocycles	$\sigma = 0.05$ K_e	ψ_e	$\sigma = 0.001$ K_e	ψ_e
0.1	1.1478289 3	8.9014500 - 7	1.6232752 2	4.4507095 - 5
0.2	6.4419718 2	1.7802850 - 6	9.1103237 1	8.9014200 - 5
0.5	3.0019409 2	4.4507100 - 6	4.2453857 1	2.2250500 - 4
1	1.6847824 2	8.9014250 - 6	2.3826426 1	4.4510500 - 4
2	9.4555215 1	1.7802835 - 5	1.3372137 1	8.9010000 - 4
3	6.7443914 1	2.6704260 - 5	9.5380258	1.3352050 - 3
4	5.3067323 1	3.5605675 - 5	7.5048765	1.7802700 - 3
5	4.4062467 1	4.4507095 - 5	6.2314042	2.2253700 - 3
6	3.7851616 1	5.3408520 - 5	5.3530650	2.6703650 - 3
7	3.3288593 1	6.2309930 - 5	4.7077632	3.1154500 - 3
8	2.9783026 1	7.1211360 - 5	4.2120089	3.5605200 - 3
9	2.6998629 1	8.0112780 - 5	3.8182434	4.0055950 - 3
10	2.4729223 1	8.9014190 - 5	3.4973089	4.4505550 - 3
20	1.3878808 1	1.7807500 - 4	1.9629140	8.9005350 - 3
30	9.8994135	2.6706500 - 4	1.4002359	1.3349070 - 2
50	6.4674873	4.4510500 - 4	9.1508972 - 1	2.2239160 - 2
60	5.5558589	5.3411000 - 4	7.8627224 - 1	2.6679520 - 2
70	4.8860990	6.2316500 - 4	6.9166300 - 1	3.1115605 - 2
80	4.3715523	7.1215500 - 4	6.1900680 - 1	3.5546940 - 2
90	3.9628594	8.0120000 - 4	5.6132274 - 1	3.9972930 - 2
100	3.6297566	8.9010000 - 4	5.1433070 - 1	4.4392645 - 2
200	2.0371368	1.7802700 - 3	2.9033326 - 1	8.8110930 - 2
300	1.4530454	2.6703650 - 3	2.0903538 - 1	1.3053851 - 1
400	1.1433151	3.5605200 - 3	1.6655492 - 1	1.7116410 - 1
500	9.4931574 - 1	4.4505550 - 3	1.4042309 - 1	2.0960808 - 1
600	8.1551141 - 1	5.3406800 - 3	1.2276182 - 1	2.4562815 - 1
700	7.1720857 - 1	6.2306150 - 3	1.1006268 - 1	2.7910852 - 1
800	6.4168815 - 1	7.1206550 - 3	1.0051681 - 1	3.1003806 - 1
900	5.8170485 - 1	8.0105750 - 3	9.3094302 - 2	3.3848445 - 1
1000	5.3281684 - 1	8.9005350 - 3	8.7165237 - 2	3.6456936 - 1
1100	4.9214287 - 1	9.7903250 - 3	8.2323018 - 2	3.8844708 - 1
1200	4.5772916 - 1	1.0680040 - 2	7.8293929 - 2	4.1028806 - 1
1300	4.2820200 - 1	1.1569835 - 2	7.4887428 - 2	4.3026680 - 1
1400	4.0256622 - 1	1.2459435 - 2	7.1967096 - 2	4.4855394 - 1
1500	3.8008249 - 1	1.3349070 - 2	6.9432988 - 2	4.6531117 - 1
1600	3.6018964 - 1	1.4238500 - 2	6.7210380 - 2	4.8068846 - 1
1700	3.4245354 - 1	1.5127950 - 2	6.5242399 - 2	4.9482307 - 1
1800	3.2653317 - 1	1.6017195 - 2	6.3485113 - 2	5.0783915 - 1
1900	3.1215646 - 1	1.6906455 - 2	6.1904070 - 2	5.1984830 - 1
2000	2.9910383 - 1	1.7795510 - 2	6.0471941 - 2	5.3095040 - 1
2500	2.4839355 - 1	2.2239160 - 2	5.4903935 - 2	5.7564850 - 1
3000	2.1342713 - 1	2.6679520 - 2	5.1003528 - 2	6.0757010 - 1
3500	1.8774622 - 1	3.1115605 - 2	4.8057671 - 2	6.3132880 - 1
4000	1.6802431 - 1	3.5546940 - 2	4.5717918 - 2	6.4962450 - 1
4500	1.5236644 - 1	3.9972930 - 2	4.3792431 - 2	6.6411170 - 1
5000	1.3961082 - 1	4.4392645 - 2	4.2165903 - 2	6.7584930 - 1
6000	1.2003470 - 1	5.3211115 - 2	3.9537140 - 2	6.9367700 - 1
7000	1.0567103 - 1	6.1997270 - 2	3.7474613 - 2	7.0655470 - 1
8000	9.4652661 - 2	7.0745950 - 2	3.5791844 - 2	7.1628120 - 1
9000	8.5915886 - 2	7.9452020 - 2	3.4379893 - 2	7.2388190 - 1
10000	7.8808566 - 2	8.8110930 - 2	3.3169919 - 2	7.2998240 - 1

Table 3.

$\alpha = 0.75$
$\epsilon_2 = 15$

f kilocycles	$\sigma = 0.02$ K_e	ψ_e	$\sigma = 0.0005$ K_e	ψ_e
0.1	7.2595074 2	2.2253500 - 6	1.1478289 2	8.9014190 - 5
0.2	4.0742606 2	4.4507100 - 6	6.4419718 1	1.7807500 - 4
0.5	1.8985942 2	1.1126775 - 5	3.0019416 1	4.4510500 - 4
1	1.0655500 2	2.2253550 - 5	1.6847837 1	8.9010000 - 4
2	5.9801968 1	4.4507095 - 5	9.4555516	1.7802790 - 3
3	4.2655276 1	6.6760650 - 5	6.7444392	2.6703650 - 3
4	3.3562722 1	8.9014190 - 5	5.3067990	3.5605200 - 3
5	2.7867550 1	1.1126774 - 4	4.4063333	4.4505550 - 3
6	2.3939464 1	1.3350944 - 4	3.7852688	5.3406800 - 3
7	2.1053554 1	1.5581000 - 4	3.3289874	6.2306150 - 3
8	1.8836440 1	1.7807500 - 4	2.9784526	7.1206550 - 3
9	1.7075433 1	2.0026000 - 4	2.7000348	8.0105750 - 3
10	1.5640134 1	2.2250500 - 4	2.4731166	8.9005350 - 3
20	8.7777297	4.4510500 - 4	1.3883169	1.7795510 - 2
30	6.2609417	6.6762000 - 4	9.9064102 - 1	2.6679520 - 2
50	4.0904023	1.1126950 - 3	6.4801608 - 1	4.4392645 - 2
60	3.5138388	1.3352050 - 3	5.5715172 - 1	5.3211115 - 2
70	3.0902466	1.5577900 - 3	4.9048147 - 1	6.1997270 - 2
80	2.7648199	1.7802700 - 3	4.3933870 - 1	7.0745950 - 2
90	2.5063408	2.0027800 - 3	3.9878623 - 1	7.9452020 - 2
100	2.2956690	2.2253700 - 3	3.6579698 - 1	8.8110930 - 2
200	1.2884197	4.4505550 - 3	2.0984605 - 1	1.7116410 - 1
300	9.1902067 - 1	6.6756500 - 3	1.5467021 - 1	2.4562815 - 1
400	7.2314369 - 1	8.9005350 - 3	1.2664325 - 1	3.1003806 - 1
500	6.0046195 - 1	1.1124945 - 2	1.0982132 - 1	3.6456936 - 1
600	5.1585127 - 1	1.3349070 - 2	9.8644170 - 2	4.1028808 - 1
700	4.5369427 - 1	1.5572530 - 2	9.0672861 - 2	4.4855394 - 1
800	4.0594634 - 1	1.7795510 - 2	8.4679771 - 2	4.8068846 - 1
900	3.6802534 - 1	2.0017755 - 2	7.9986224 - 2	5.0783918 - 1
1000	3.3712191 - 1	2.2239160 - 2	7.6189867 - 2	5.3095040 - 1
1100	3.1141376 - 1	2.4459810 - 2	7.3038597 - 2	5.5077950 - 1
1200	2.8966518 - 1	2.6679520 - 2	7.0367106 - 2	5.6792730 - 1
1300	2.7100734 - 1	2.8898080 - 2	6.8062787 - 2	5.8286950 - 1
1400	2.5481082 - 1	3.1115605 - 2	6.6046354 - 2	5.9598340 - 1
1500	2.4060806 - 1	3.3331970 - 2	6.4260417 - 2	6.0757010 - 1
1600	2.2804407 - 1	3.5546940 - 2	6.2662354 - 2	6.1787110 - 1
1700	2.1684429 - 1	3.7760675 - 2	6.1219835 - 2	6.2708150 - 1
1800	2.0679307 - 1	3.9972930 - 2	5.9907881 - 2	6.3536070 - 1
1900	1.9771828 - 1	4.2183515 - 2	5.8706819 - 2	6.4283900 - 1
2000	1.8948105 - 1	4.4392645 - 2	5.7600964 - 2	6.4962450 - 1
2500	1.5750084 - 1	5.5410890 - 2	5.3125706 - 2	6.7584930 - 1
3000	1.3548053 - 1	6.6376540 - 2	4.9813671 - 2	6.9367700 - 1
3500	1.1933493 - 1	7.7279740 - 2	4.7215056 - 2	7.0655470 - 1
4000	1.0695969 - 1	8.8110930 - 2	4.5094901 - 2	7.1628120 - 1
4500	9.7155979 - 2	9.8860830 - 2	4.3315953 - 2	7.2388190 - 1
5000	8.9188683 - 2	1.0952082 - 1	4.1791479 - 2	7.2998240 - 1
6000	7.7009294 - 2	1.3053851 - 1	3.9290906 - 2	7.3916280 - 1
7000	6.8127009 - 2	1.5110352 - 1	3.7302111 - 2	7.4573910 - 1
8000	6.1359360 - 2	1.7116410 - 1	3.5665207 - 2	7.5068010 - 1
9000	5.6032310 - 2	1.9067715 - 1	3.4283522 - 2	7.5452760 - 1
10000	5.1732308 - 2	2.0960812 - 1	3.3094456 - 2	7.5760820 - 1

Table 4.

$\alpha = 0.75$
$\epsilon_2 = 15$

f kilocycles	$\sigma = 0.01$ K_e	ψ_e	$\sigma = 0.0002$ K_e	ψ_e
0.1	5.1332468 2	4.4507100 - 6	7.2595074 1	2.2250500 - 4
0.2	2.8809374 2	8.9014250 - 6	4.0742613 1	4.4510500 - 4
0.5	1.3425088 2	2.2253550 - 5	1.8985965 1	1.1126950 - 3
1	7.5345756 1	4.4507095 - 5	1.0655551 1	2.2253700 - 3
2	4.2286377 1	8.9014200 - 5	5.9803145	4.4505550 - 3
3	3.0161834 1	1.3350944 - 4	4.2657161	6.6756500 - 3
4	2.3732428 1	1.7807500 - 4	3.3565360	8.9005350 - 3
5	1.9705334 1	2.2250500 - 4	2.7870974	1.1124945 - 2
6	1.6927758 1	2.6706500 - 4	2.3943697	1.3349070 - 2
7	1.4887113 1	3.1152500 - 4	2.1058622	1.5572530 - 2
8	1.3319376 1	3.5612500 - 4	1.8842360	1.7795510 - 2
9	1.2074156 1	4.0055500 - 4	1.7082224	2.0017755 - 2
10	1.1059247 1	4.4510500 - 4	1.5647813	2.2239160 - 2
20	6.2067961	8.9010000 - 4	8.7949309 - 1	4.4392645 - 2
30	4.4271596	1.3352050 - 3	6.2884496 - 1	6.6376540 - 2
50	2.8923617	2.2253700 - 3	4.1397722 - 1	1.0952082 - 1
60	2.4846727	2.6703650 - 3	3.5744548 - 1	1.3053851 - 1
70	2.1851501	3.1154500 - 3	3.1621756 - 1	1.5110352 - 1
80	1.9550413	3.5605200 - 3	2.8480491 - 1	1.7116410 - 1
90	1.7722716	4.0055950 - 3	2.6007894 - 1	1.9067715 - 1
100	1.6233071	4.4505550 - 3	2.4012011 - 1	2.0960812 - 1
200	9.1110397 - 1	8.9005350 - 3	1.4905046 - 1	3.6456936 - 1
300	6.4993190 - 1	1.3349070 - 2	1.1872874 - 1	4.6531117 - 1
400	5.1146034 - 1	1.7795510 - 2	1.0340556 - 1	5.3095040 - 1
500	4.2474701 - 1	2.2239160 - 2	9.3884409 - 2	5.7564850 - 1
600	3.6495523 - 1	2.6679520 - 2	8.7214803 - 2	6.0757010 - 1
700	3.2104153 - 1	3.1115605 - 2	8.2177461 - 2	6.3132880 - 1
800	2.8731751 - 1	3.5546940 - 2	7.8176534 - 2	6.4962450 - 1
900	2.6054293 - 1	3.9972930 - 2	7.4883999 - 2	6.6411170 - 1
1000	2.3873115 - 1	4.4392645 - 2	7.2102678 - 2	6.7584930 - 1
1100	2.2059362 - 1	4.8805605 - 2	6.9705812 - 2	6.8554250 - 1
1200	2.0525645 - 1	5.3211115 - 2	6.7607554 - 2	6.9367700 - 1
1300	1.9210527 - 1	5.7608600 - 2	6.5747276 - 2	7.0059740 - 1
1400	1.8069492 - 1	6.1997270 - 2	6.4080688 - 2	7.0655470 - 1
1500	1.7069477 - 1	6.6376540 - 2	6.2574522 - 2	7.1173540 - 1
1600	1.6185377 - 1	7.0745950 - 2	6.1203193 - 2	7.1628120 - 1
1700	1.5397774 - 1	7.5104610 - 2	5.9946621 - 2	7.2030140 - 1
1800	1.4691411 - 1	7.9452020 - 2	5.8788793 - 2	7.2388190 - 1
1900	1.4054120 - 1	8.3787630 - 2	5.7716724 - 2	7.2709060 - 1
2000	1.3476077 - 1	8.8110930 - 2	5.6719765 - 2	7.2998240 - 1
2500	1.1237070 - 1	1.0952082 - 1	5.2596561 - 2	7.4100270 - 1
3000	9.7025628 - 2	1.3053851 - 1	4.9465846 - 2	7.4837330 - 1
3500	8.5834653 - 2	1.5110352 - 1	4.6971445 - 2	7.5364780 - 1
4000	7.7307952 - 2	1.7116410 - 1	4.4916089 - 2	7.5760820 - 1
4500	7.0596293 - 2	1.9067715 - 1	4.3179898 - 2	7.6069080 - 1
5000	6.5178625 - 2	2.0960808 - 1	4.1684954 - 2	7.6315820 - 1
6000	5.6980993 - 2	2.4562815 - 1	3.9221188 - 2	7.6686130 - 1
7000	5.1086571 - 2	2.7910852 - 1	3.7253410 - 2	7.6950760 - 1
8000	4.6655772 - 2	3.1003806 - 1	3.5629523 - 2	7.7149280 - 1
9000	4.3210547 - 2	3.3848445 - 1	3.4256400 - 2	7.7303720 - 1
10000	4.0458519 - 2	3.6456936 - 1	3.3073244 - 2	7.7427300 - 1

Table 5.

$\alpha = 0.75$
$\epsilon_2 = 15$

f kilocycles	$\sigma = 0.005$ K_e	ψ_e	$\sigma = 0.0001$ K_e	ψ_e
0.1	3.6297538 2	8.9014250 - 6	5.1332480 1	4.4510500 - 4
0.2	2.0371304 2	1.7802835 - 5	2.8809396 1	8.9010000 - 4
0.5	9.4929707 1	4.4507095 - 5	1.3425154 1	2.2253700 - 3
1	5.3277497 1	8.9014190 - 5	7.5347240	4.4505550 - 3
2	2.9900986 1	1.7807500 - 4	4.2289700	8.9005350 - 3
3	2.1327639 1	2.6706500 - 4	3.0167167	1.3349070 - 2
4	1.6781363 1	3.5612500 - 4	2.3739887	1.7795510 - 2
5	1.3933779 1	4.4510500 - 4	1.9715009	2.2239160 - 2
6	1.1969735 1	5.3411000 - 4	1.6939722	2.6679520 - 2
7	1.0526781 1	6.2316500 - 4	1.4901427	3.1115605 - 2
8	9.4182243	7.1215500 - 4	1.3336098	3.5546940 - 2
9	8.5377215	8.0120000 - 4	1.2093332	3.9972930 - 2
10	7.8200730	8.9010000 - 4	1.1080918	4.4392645 - 2
20	4.3888781	1.7802700 - 3	6.2550404 - 1	8.8110930 - 2
30	3.1304916	2.6703650 - 3	4.5035310 - 1	1.3053851 - 1
50	2.0452388	4.4505550 - 3	3.0253240 - 1	2.0960808 - 1
60	1.7569661	5.3406800 - 3	2.6448234 - 1	2.4562815 - 1
70	1.5451790	6.2306150 - 3	2.3712284 - 1	2.7910852 - 1
80	1.3824752	7.1206550 - 3	2.1655691 - 1	3.1003806 - 1
90	1.2532452	8.0105750 - 3	2.0056560 - 1	3.3848445 - 1
100	1.1479191	8.9005350 - 3	1.8779182 - 1	3.6456936 - 1
200	6.4439965 - 1	1.7795510 - 2	1.3028284 - 1	5.3095040 - 1
300	4.5981481 - 1	2.6679520 - 2	1.0988377 - 1	6.0757010 - 1
400	3.6199738 - 1	3.5546940 - 2	9.8496262 - 2	6.4962450 - 1
500	3.0078241 - 1	4.4392645 - 2	9.0843683 - 2	6.7584930 - 1
600	2.5860692 - 1	5.3211115 - 2	8.5180180 - 2	6.9367700 - 1
700	2.2766134 - 1	6.1997270 - 2	8.0736608 - 2	7.0655470 - 1
800	2.0392297 - 1	7.0745950 - 2	7.7111191 - 2	7.1628120 - 1
900	1.8510016 - 1	7.9452020 - 2	7.4069232 - 2	7.2388190 - 1
1000	1.6978792 - 1	8.8110930 - 2	7.1462425 - 2	7.2998240 - 1
1100	1.5707475 - 1	9.6717740 - 2	6.9191385 - 2	7.3498580 - 1
1200	1.4634252 - 1	1.0526816 - 1	6.7186501 - 2	7.3916280 - 1
1300	1.3715657 - 1	1.1375773 - 1	6.5397206 - 2	7.4270210 - 1
1400	1.2920193 - 1	1.2218255 - 1	6.3785711 - 2	7.4573910 - 1
1500	1.2224463 - 1	1.3053851 - 1	6.2323062 - 2	7.4837330 - 1
1600	1.1610696 - 1	1.3882188 - 1	6.0986648 - 2	7.5068010 - 1
1700	1.1065149 - 1	1.4702934 - 1	5.9758457 - 2	7.5271650 - 1
1800	1.0577018 - 1	1.5515751 - 1	5.8624001 - 2	7.5452760 - 1
1900	1.0137685 - 1	1.6320342 - 1	5.7571365 - 2	7.5614870 - 1
2000	9.7401914 - 2	1.7116410 - 1	5.6590726 - 2	7.5760820 - 1
2500	8.2119922 - 2	2.0960808 - 1	5.2519751 - 2	7.6315820 - 1
3000	7.1791552 - 2	2.4562815 - 1	4.9415599 - 2	7.6686130 - 1
3500	6.4365046 - 2	2.7910852 - 1	4.6936357 - 2	7.6950760 - 1
4000	5.8782593 - 2	3.1003806 - 1	4.4890385 - 2	7.7149280 - 1
4500	5.4441881 - 2	3.3848445 - 1	4.3160365 - 2	7.7303720 - 1
5000	5.0974539 - 2	3.6456936 - 1	4.1669676 - 2	7.7427300 - 1
6000	4.5786569 - 2	4.1028808 - 1	3.9211204 - 2	7.7612670 - 1
7000	4.2086615 - 2	4.4855394 - 1	3.7246438 - 2	7.7745100 - 1
8000	3.9304869 - 2	4.8068846 - 1	3.5624417 - 2	7.7844420 - 1
9000	3.7126316 - 2	5.0783918 - 1	3.4252522 - 2	7.7921680 - 1
10000	3.5364203 - 2	5.3095040 - 1	3.3070208 - 2	7.7983490 - 1

Table 6.

$\alpha = 0.75$
$\epsilon_2 = 80$
$\sigma = 5$

f kilocycles	K_e		ψ_e
0.1	1.1478289	4	4.5060000 - 8
0.2	6.4419718	3	9.0125000 - 8
0.5	3.0019409	3	2.2530500 - 7
1	1.6847824	3	4.5061500 - 7
2	9.4555215	2	9.0124000 - 7
3	6.7443914	2	1.3518550 - 6
4	5.3067323	2	1.8024800 - 6
5	4.4062467	2	2.2530950 - 6
6	3.7851616	2	2.7037200 - 6
7	3.3288593	2	3.1543350 - 6
8	2.9783026	2	3.6049500 - 6
9	2.6998629	2	4.0555750 - 6
10	2.4729223	2	4.5061850 - 6
20	1.3878807	2	9.0123850 - 6
30	9.8994129	1	1.3518570 - 5
50	6.4674858	1	2.2530955 - 5
60	5.5558573	1	2.7037145 - 5
70	4.8860969	1	3.1543335 - 5
80	4.3715501	1	3.6049530 - 5
90	3.9628569	1	4.0555720 - 5
100	3.6297538	1	4.5061905 - 5
200	2.0371304	1	9.0123810 - 5
300	1.4530350	1	1.3517000 - 4
400	1.1433008	1	1.8021000 - 4
500	9.4929712		2.2536500 - 4
600	8.1548838		2.7042000 - 4
700	7.1718107		3.1545500 - 4
800	6.4165593		3.6050500 - 4
900	5.8166789		4.0556500 - 4
1000	5.3277506		4.5060500 - 4
1100	4.9209623		4.9566000 - 4
1200	4.5767747		5.4069000 - 4
1300	4.2814527		5.8575500 - 4
1400	4.0250435		6.3080500 - 4
1500	3.8001550		6.7595500 - 4
1600	3.6011735		7.2099500 - 4
1700	3.4237597		7.6610500 - 4
1800	3.2645026		8.1114000 - 4
1900	3.1206817		8.5621500 - 4
2000	2.9901009		9.0124500 - 4
2500	2.4827197		1.1266000 - 3
3000	2.1327676		1.3518450 - 3
3500	1.8756632		1.5771950 - 3
4000	1.6781415		1.8024450 - 3
4500	1.5212544		2.0277800 - 3
5000	1.3933846		2.2530300 - 3
6000	1.1969820		2.7036550 - 3
7000	1.0526882		3.1542350 - 3
8000	9.4183421 - 1		3.6048200 - 3
9000	8.5378566 - 1		4.0554600 - 3
10000	7.8202258 - 1		4.5060050 - 3

Table 7.

s	$\lvert\tau_{s,0}\rvert$		$\lvert\tau_{s,\infty}\rvert$		s	$\lvert\tau_{s,0}\rvert$		$\lvert\tau_{s,\infty}\rvert$	
0	1.8557571		8.0861652	− 1	51	3.0980738	1	3.0780730	1
1	3.2446076		2.5780961		52	3.1378570	1	3.1179842	1
2	4.3816712		3.8257153		53	3.1773894	1	3.1576414	1
3	5.3866138		4.8918203		54	3.2166776	1	3.1970515	1
4	6.3052630		5.8513010		55	3.2557272	1	3.2362195	1
5	7.1612827		6.7373164		56	3.2945439	1	3.2751525	1
6	7.9688916		7.5682909		57	3.3331334	1	3.3138552	1
7	8.7374715		8.3558096		58	3.3715009	1	3.3523336	1
8	9.4736218		9.1077585		59	3.4096509	1	3.3905918	1
9	1.0182207	1	9.8298130		60	3.4475890	1	3.4286356	1
10	1.0866942	1	1.0526230	1	61	3.4853194	1	3.4664694	1
11	1.1530746	1	1.1200307	1	62	3.5228470	1	3.5040980	1
12	1.2175965	1	1.1854661	1	63	3.5601755	1	3.5415258	1
13	1.2804521	1	1.2491419	1	64	3.5973090	1	3.5787564	1
14	1.3418011	1	1.3112333	1	65	3.6342521	1	3.6157948	1
15	1.4017783	1	1.3718872	1	66	3.6710087	1	3.6526440	1
16	1.4604989		1.4312281	1	67	3.7075815	1	3.6893084	1
17	1.5180618	1	1.4893630	1	68	3.7439754	1	3.7257917	1
18	1.5745534	1	1.5463843	1	69	3.7801933	1	3.7620969	1
19	1.6300492	1	1.6023727	1	70	3.8162378	1	3.7982283	1
20	1.6846159	1	1.6573993	1	71	3.8521136	1	3.8341882	1
21	1.7383127	1	1.7115269	1	72	3.8878231	1	3.8699804	1
22	1.7911926	1	1.7648116	1	73	3.9233690	1	3.9056081	1
23	1.8433032	1	1.8173035	1	74	3.9587544	1	3.9410734	1
24	1.8946873	1	1.8690478	1	75	3.9939828	1	3.9763801	1
25	1.9453839	1	1.9200854	1	76	4.0290565	1	4.0115311	1
26	1.9954283	1	1.9704533	1	77	4.0639783	1	4.0465285	1
27	2.0448528	1	2.0201855	1	78	4.0987503	1	4.0813750	1
28	2.0936871	1	2.0693128	1	79	4.1333754	1	4.1160739	1
29	2.1419584	1	2.1178637	1	80	4.1678564	1	4.1506266	1
30	2.1896918	1	2.1658642	1	81	4.2021954	1	4.1850361	1
31	2.2369104	1	2.2133386	1	82	4.2363944	1	4.2193049	1
32	2.2836359	1	2.2603091	1	83	4.2704561	1	4.2534357	1
33	2.3298881	1	2.3067965	1	84	4.3043823	1	4.2874291	1
34	2.3756857	1	2.3528200	1	85	4.3381753	1	4.3212889	1
35	2.4210460	1	2.3983978	1	86	4.3718375	1	4.3550161	1
36	2.4659854	1	2.4435464	1	87	4.4053702	1	4.3886131	1
37	2.5105189	1	2.4882817	1	88	4.4387761	1	4.4220828	1
38	2.5546608	1	2.5326184	1	89	4.4720568	1	4.4554259	1
39	2.5984247	1	2.5765704	1	90	4.5052142	1	4.4886444	1
40	2.6418230	1	2.6201506	1	91	4.5382498	1	4.5217406	1
41	2.6848678	1	2.6633713	1	92	4.5711652	1	4.5547161	1
42	2.7275703	1	2.7062441	1	93	4.6039630	1	4.5875727	1
43	2.7699410	1	2.7487799	1	94	4.6366442	1	4.6203125	1
44	2.8119902	1	2.7909892	1	95	4.6692108	1	4.6529362	1
45	2.8537272	1	2.8328816	1	96	4.7016645	1	4.6854459	1
46	2.8951613	1	2.8744665	1	97	4.7340062	1	4.7178433	1
47	2.9363010	1	2.9157527	1	98	4.7662376	1	4.7501300	1
48	2.9771544	1	2.9567487	1	99	4.7983610	1	4.7823069	1
49	3.0177295	1	2.9974623	1	100	4.8303766	1	4.8143761	1
50	3.0580334	1	3.0379012	1					

Table 8.

$[\delta^2 \tau_s]$

$\sigma = 0.005$

$\epsilon_2 = 15$

s	f = 0.1 kc		f = 0.2 kc		f = 0.5 kc	
0	1.0659465	5	3.3589807	4	7.3025868	3
1	3.3968531	5	1.0699866	5	2.3237677	4
2	5.0405458	5	1.5877027	5	3.4479219	4
3	6.4451244	5	2.0301105	5	4.4085882	4
4	7.7092352	5	2.4282765	5	5.2731972	4
5	8.8765604	5	2.7959582	5	6.0716158	4
6	9.9713707	5	3.1408002	5	6.8204406	4
7	1.1008930	6	3.4676091	5	7.5301098	4
8	1.1999626	6	3.7796579	5	8.2077273	4
9	1.2950937	6	4.0793011	5	8.8584076	4
10	1.3868471	6	4.3683057	5	9.4859864	4
11	1.4756573	6	4.6480394	5	1.0093433	5
12	1.5618690	6	4.9195884	5	1.0683109	5
13	1.6457622	6	5.1838354	5	1.1256928	5
14	1.7275682	6	5.4415078	5	1.1816468	5
15	1.8074804	6	5.6932146	5	1.2363056	5
16	1.8856624	6	5.9394725	5	1.2897813	5
17	1.9622557	6	6.1807257	5	1.3421699	5
18	2.0373819	6	6.4173580	5	1.3935553	5
19	2.1111471	6	6.6497035	5	1.4440099	5
20	2.1836450	6	6.8780579	5	1.4935976	5
21	2.2549587	6	7.1026817	5	1.5423753	5
22	2.3251619	6	7.3238071	5	1.5903934	5
23	2.3943203	6	7.5416427	5	1.6376969	5
24	2.4624942	6	7.7563760	5	1.6843269	5
25	2.5297365	6	7.9681767	5	1.7303200	5
26	2.5960969	6	8.1771963	5	1.7757097	5
27	2.6616195	6	8.3835820	5	1.8205265	5
28	2.7263452	6	8.5874545	5	1.8647980	5
29	2.7903116	6	8.7889359	5	1.9085504	5
30	2.8535527	6	8.9881324	5	1.9518065	5
31	2.9161006	6	9.1851462	5	1.9945886	5
32	2.9779848	6	9.3800694	5	2.0369168	5
33	3.0392326	6	9.5729871	5	2.0788096	5
34	3.0998689	6	9.7639801	5	2.1202841	5
35	3.1599181	6	9.9531229	5	2.1613571	5
36	3.2194017	6	1.0140485	6	2.2020433	5
37	3.2783411	6	1.0326132	6	2.2423571	5
38	3.3367552	6	1.0510125	6	2.2823118	5
39	3.3946624	6	1.0692520	6	2.3219197	5
40	3.4520798	6	1.0873374	6	2.3611925	5
41	3.5090235	6	1.1052735	6	2.4001415	5
42	3.5655088	6	1.1230653	6	2.4387768	5
43	3.6215502	6	1.1407172	6	2.4771085	5
44	3.6771613	6	1.1582336	6	2.5151459	5
45	3.7323550	6	1.1756186	6	2.5528979	5
46	3.7871436	6	1.1928758	6	2.5903727	5
47	3.8415387	6	1.2100092	6	2.6275783	5
48	3.8955516	6	1.2270221	6	2.6645224	5
49	3.9491921	6	1.2439179	6	2.7012121	5
50	4.0024707	6	1.2606996	6	2.7376541	5

Table 9.

$|\delta^2 \tau_s|$

$\sigma = 0.005$

$\epsilon_2 = 15$

s	f = 0.1 kc		f = 0.2 kc		f = 0.5 kc	
51	4.0553972	6	1.2773704	6	2.7738554	5
52	4.1079808	6	1.2939332	6	2.8098218	5
53	4.1602296	6	1.3103906	6	2.8455596	5
54	4.2121529	6	1.3267453	6	2.8810745	5
55	4.2637571	6	1.3429996	6	2.9163714	5
56	4.3150520	6	1.3591565	6	2.9514564	5
57	4.3660428	6	1.3752176	6	2.9863338	5
58	4.4167385	6	1.3911858	6	3.0210091	5
59	4.4671442	6	1.4070625	6	3.0554861	5
60	4.5172674	6	1.4228503	6	3.0897697	5
61	4.5671138	6	1.4385510	6	3.1238641	5
62	4.6166900	6	1.4541665	6	3.1577738	5
63	4.6660013	6	1.4696987	6	3.1915025	5
64	4.7150531	6	1.4851490	6	3.2250531	5
65	4.7638519	6	1.5005195	6	3.2584309	5
66	4.8124009	6	1.5158116	6	3.2916381	5
67	4.8607064	6	1.5310270	6	3.3246788	5
68	4.9087738	6	1.5461671	6	3.3575562	5
69	4.9566067	6	1.5612334	6	3.3902730	5
70	5.0042098	6	1.5762275	6	3.4228335	5
71	5.0515872	6	1.5911506	6	3.4552392	5
72	5.0987438	6	1.6060040	6	3.4874939	5
73	5.1456838	6	1.6207891	6	3.5196001	5
74	5.1924100	6	1.6355069	6	3.5515603	5
75	5.2389267	6	1.6501588	6	3.5833775	5
76	5.2852388	6	1.6647460	6	3.6150542	5
77	5.3313483	6	1.6792696	6	3.6465926	5
78	5.3772588	6	1.6937305	6	3.6779952	5
79	5.4229749	6	1.7081303	6	3.7092644	5
80	5.4684985	6	1.7224693	6	3.7404021	5
81	5.5138334	6	1.7367489	6	3.7714108	5
82	5.5589828	6	1.7509701	6	3.8022927	5
83	5.6039508	6	1.7651341	6	3.8330501	5
84	5.6487372	6	1.7792409	6	3.8636835	5
85	5.6933480	6	1.7932924	6	3.8941969	5
86	5.7377841	6	1.8072889	6	3.9245908	5
87	5.7820483	6	1.8212313	6	3.9548670	5
88	5.8261450	6	1.8351209	6	3.9850286	5
89	5.8700749	6	1.8489579	6	4.0150764	5
90	5.9138406	6	1.8627433	6	4.0450117	5
91	5.9574452	6	1.8764778	6	4.0748368	5
92	6.0008908	6	1.8901624	6	4.1045531	5
93	6.0441796	6	1.9037975	6	4.1341623	5
94	6.0873149	6	1.9173842	6	4.1636664	5
95	6.1302966	6	1.9309227	6	4.1930656	5
96	6.1731288	6	1.9444139	6	4.2223622	5
97	6.2158125	6	1.9578585	6	4.2515576	5
98	6.2583507	6	1.9712572	6	4.2806531	5
99	6.3007444	6	1.9846102	6	4.3096498	5
100	6.3429959	6	1.9979187	6	4.3385496	5

Table 10.

$|\delta^2 \tau_s|$

$\sigma = 0.005$
$\epsilon_2 = 15$

s	f = 1 kc		f = 2 kc		f = 3 kc		f = 4 kc	
0	2.2955214	6	7.2311061	5	3.6792227	5	2.2780315	5
1	7.3179890	6	2.3050429	6	1.1727277	6	7.2605480	5
2	1.0859318	7	3.4204850	6	1.7402188	6	1.0773933	6
3	1.3885436	7	4.3736492	6	2.2251512	6	1.3776195	6
4	1.6608906	7	5.2314871	6	2.6615855	6	1.6478204	6
5	1.9123850	7	6.0236428	6	3.0646037	6	1.8973333	6
6	2.1482559	7	6.7665894	6	3.4425862	6	2.1313463	6
7	2.3717923	7	7.4706839	6	3.8008021	6	2.3531219	6
8	2.5852321	7	8.1429767	6	4.1428389	6	2.5648806	6
9	2.7901865	7	8.7885423	6	4.4712778	6	2.7682208	6
10	2.9878636	7	9.4111862	6	4.7880550	6	2.9643410	6
11	3.1791998	7	1.0013857	7	5.0946707	6	3.1541703	6
12	3.3649380	7	1.0598895	7	5.3923155	6	3.3384453	6
13	3.5456806	7	1.1168198	7	5.6819560	6	3.5177648	6
14	3.7219265	7	1.1723339	7	5.9643890	6	3.6926226	6
15	3.8940921	7	1.2265625	7	6.2402848	6	3.8634326	6
16	4.0625308	7	1.2796173	7	6.5102072	6	4.0305446	6
17	4.2275459	7	1.3315939	7	6.7746440	6	4.1942607	6
18	4.3894004	7	1.3825749	7	7.0340158	6	4.3548404	6
19	4.5483230	7	1.4326324	7	7.2886887	6	4.5125116	6
20	4.7045156	7	1.4818299	7	7.5389873	6	4.6674740	6
21	4.8581563	7	1.5302237	7	7.7851960	6	4.8199049	6
22	5.0094045	7	1.5778639	7	8.0275712	6	4.9699619	6
23	5.1584023	7	1.6247951	7	8.2663402	6	5.1177864	6
24	5.3052781	7	1.6710582	7	8.5017080	6	5.2635054	6
25	5.4501476	7	1.7166892	7	8.7338614	6	5.4072344	6
26	5.5931165	7	1.7617216	7	8.9629691	6	5.5490775	6
27	5.7342809	7	1.8061856	7	9.1891854	6	5.6891307	6
28	5.8737281	7	1.8501087	7	9.4126493	6	5.8274793	6
29	6.0115397	7	1.8935167	7	9.6334917	6	5.9642057	6
30	6.1477884	7	1.9364324	7	9.8518306	6	6.0993814	6
31	6.2825444	7	1.9788777	7	1.0067776	7	6.2330760	6
32	6.4158698	7	2.0208726	7	1.0281431	7	6.3653516	6
33	6.5478239	7	2.0624356	7	1.0492887	7	6.4962666	6
34	6.6784612	7	2.1035837	7	1.0702232	7	6.6258756	6
35	6.8078334	7	2.1443333	7	1.0909551	7	6.7542284	6
36	6.9359870	7	2.1846992	7	1.1114917	7	6.8813735	6
37	7.0629681	7	2.2246957	7	1.1318405	7	7.0073548	6
38	7.1888172	7	2.2643358	7	1.1520078	7	7.1322127	6
39	7.3135745	7	2.3036319	7	1.1720002	7	7.2559879	6
40	7.4372766	7	2.3425956	7	1.1918235	7	7.3787157	6
41	7.5599582	7	2.3812379	7	1.2114832	7	7.5004314	6
42	7.6816523	7	2.4195691	7	1.2309846	7	7.6211670	6
43	7.8023898	7	2.4575990	7	1.2503327	7	7.7409538	6
44	7.9222002	7	2.4953370	7	1.2695324	7	7.8598208	6
45	8.0411115	7	2.5327917	7	1.2885879	7	7.9777959	6
46	8.1591502	7	2.5699715	7	1.3075036	7	8.0949054	6
47	8.2763407	7	2.6068842	7	1.3262834	7	8.2111727	6
48	8.3927075	7	2.6435374	7	1.3449312	7	8.3266233	6
49	8.5082727	7	2.6799382	7	1.3634504	7	8.4412784	6
50	8.6230579	7	2.7160933	7	1.3818448	7	8.5551599	6

Table 11.

$|\delta^2 \tau_s|$

$\sigma = 0.005$
$\epsilon_2 = 15$

s	f = 5 kc		f = 6 kc		f = 7 kc		f = 8 kc	
0	1.5706392	5	1.1591512	5	8.9658954	4	7.1774695	4
1	3.6939441	5	3.6939441	5	2.8570340	5	2.2869948	5
2	5.4814019	5	5.4814019	5	4.2395040	5	3.3936197	5
3	7.0088304	5	7.0088304	5	5.4208630	5	4.3392636	5
4	1.1360404	6	8.3835050	5	6.4840783	5	5.1903371	5
5	1.3080591	6	9.6529278	5	7.4658891	5	5.9762498	5
6	1.4693920	6	1.0843494	6	8.3867105	5	6.7133419	5
7	1.6222881	6	1.1971801	6	9.2593783	5	7.4118884	5
8	1.7682785	6	1.3049148	6	1.0092631	6	8.0788847	5
9	1.9084650	6	1.4083663	6	1.0892759	6	8.7193648	5
10	2.0436741	6	1.5081449	6	1.1664477	6	9.3371046	5
11	2.1745458	6	1.6047226	6	1.2411440	6	9.9350278	5
12	2.3015885	6	1.6984746	6	1.3136547	6	1.0515457	6
13	2.4252147	6	1.7897056	6	1.3842157	6	1.1080277	6
14	2.5457652	6	1.8786665	6	1.4530207	6	1.1631044	6
15	2.6635248	6	1.9655679	6	1.5202332	6	1.2169061	6
16	2.7787347	6	2.0505881	6	1.5859905	6	1.2695431	6
17	2.8916036	6	2.1338804	6	1.6504113	6	1.3211103	6
18	3.0023104	6	2.2155774	6	1.7135983	6	1.3716896	6
19	3.1110119	6	2.2957943	6	1.7756407	6	1.4213530	6
20	3.2178459	6	2.3746333	6	1.8366173	6	1.4701630	6
21	3.3229347	6	2.4521842	6	1.8965976	6	1.5181757	6
22	3.4263868	6	2.5285276	6	1.9556439	6	1.5654406	6
23	3.5282998	6	2.6037349	6	2.0138117	6	1.6120024	6
24	3.6287613	6	2.6778713	6	2.0711510	6	1.6579011	6
25	3.7278508	6	2.7509950	6	2.1277073	6	1.7031727	6
26	3.8256400	6	2.8231594	6	2.1835215	6	1.7478504	6
27	3.9221951	6	2.8944129	6	2.2386312	6	1.7919643	6
28	4.0175756	6	2.9647995	6	2.2930705	6	1.8355416	6
29	4.1118374	6	3.0343607	6	2.3468714	6	1.8786076	6
30	4.2050302	6	3.1031331	6	2.4000620	6	1.9211853	6
31	4.2972016	6	3.1711517	6	2.4526697	6	1.9632964	6
32	4.3883949	6	3.2384483	6	2.5047193	6	2.0049607	6
33	4.4786501	6	3.3050529	6	2.5562334	6	2.0461963	6
34	4.5680049	6	3.3709927	6	2.6072333	6	2.0870204	6
35	4.6564942	6	3.4362941	6	2.6577393	6	2.1274491	6
36	4.7441503	6	3.5009805	6	2.7077698	6	2.1674972	6
37	4.8310036	6	3.5650747	6	2.7573424	6	2.2071788	6
38	4.9170836	6	3.6285979	6	2.8064733	6	2.2465066	6
39	5.0024163	6	3.6915699	6	2.8551777	6	2.2854932	6
40	5.0870272	6	3.7540092	6	2.9034703	6	2.3241501	6
41	5.1709402	6	3.8159334	6	2.9513644	6	2.3624881	6
42	5.2541778	6	3.8773591	6	2.9988731	6	2.4005174	6
43	5.3367610	6	3.9383020	6	3.0460083	6	2.4382479	6
44	5.4187101	6	3.9987772	6	3.0927816	6	2.4756887	6
45	5.5000446	6	4.0587981	6	3.1392037	6	2.5128485	6
46	5.5807815	6	4.1183788	6	3.1852852	6	2.5497354	6
47	5.6609391	6	4.1775315	6	3.2310358	6	2.5863575	6
48	5.7405327	6	4.2362681	6	3.2764648	6	2.6227221	6
49	5.8195781	6	4.2946004	6	3.3215806	6	2.6588362	6
50	5.8980899	6	4.3525392	6	3.3663922	6	2.6947066	6

Table 12.

$|\delta^2 \tau_s|$

$\sigma = 0.005$
$\epsilon_2 = 15$

s	f = 9 kc	
0	5.8985789	4
1	1.8793769	5
2	2.7887545	5
3	3.5658464	5
4	4.2652251	5
5	4.9110568	5
6	5.5167703	5
7	6.0908084	5
8	6.6389199	5
9	7.1652412	5
10	7.6728759	5
11	8.1642258	5
12	8.6412009	5
13	9.1053481	5
14	9.5579464	5
15	1.0000068	6
16	1.0432618	6
17	1.0856378	6
18	1.1272019	6
19	1.1680133	6
20	1.2081235	6
21	1.2475785	6
22	1.2864190	6
23	1.3246817	6
24	1.3623994	6
25	1.3996019	6
26	1.4363164	6
27	1.4725674	6
28	1.5083775	6
29	1.5437675	6
30	1.5787563	6
31	1.6133615	6
32	1.6475996	6
33	1.6814855	6
34	1.7150331	6
35	1.7482559	6
36	1.7811658	6
37	1.8137746	6
38	1.8460928	6
39	1.8781304	6
40	1.9098972	6
41	1.9414018	6
42	1.9726529	6
43	2.0036584	6
44	2.0344257	6
45	2.0649622	6
46	2.0952745	6
47	2.1253691	6
48	2.1552521	6
49	2.1849293	6
50	2.2144062	6

Table 13.

$\lfloor \delta^2 \tau_s \rfloor$

$\sigma = 0.005$
$\epsilon_2 = 15$

s	f = 10 kc		f = 20 kc		f = 30 kc		f = 50 kc	
0	5.1107712	1	1.6665895	1	8.7954800		4.04705	
1	1.5806772	2	4.9896740	1	2.5439860	1	1.090608	1
2	2.3422597	2	7.3846264	1	3.7604183	1	1.607936	1
3	2.9936193	2	9.4346831	1	4.8026086	1	2.0520664	1
4	3.5800264	2	1.1280846	2	5.7414223	1	2.4523977	1
5	4.1216237	2	1.2986177	2	6.6087433	1	2.8223532	1
6	4.6296261	2	1.4585862	2	7.4223992	1	3.1694761	1
7	5.1110938	2	1.6102070	2	8.1936374	1	3.4985376	1
8	5.5708357	2	1.7549917	2	8.9301282	1	3.8127966	1
9	6.0123150	2	1.8940286	2	9.6374005	1	4.1146040	1
10	6.4381299	2	2.0281351	2	1.0319606	2	4.4057260	1

	f = 60 kc		f = 70 kc		f = 80 kc		f = 90 kc	
0	3.09944		2.48563		2.0607		1.7516	
1	8.06673		6.25401		5.01872		4.1350	
2	1.187676	1	9.194483		7.36705		6.05999	
3	1.5151502	1	1.172504	1	9.390813		7.721416	
4	1.8104331	1	1.4007703	1	1.121707	1	9.221340	
5	2.0833546	1	1.6117856	1	1.2905603	1	1.060842	1
6	2.3394550	1	1.8098136	1	1.4490374	1	1.1910398	1
7	2.5822434	1	1.9975590	1	1.5992945	1	1.3144920	1
8	2.8141189	1	2.1768725	1	1.7428093	1	1.4324095	1
9	3.0368130	1	2.3490908	1	1.8806491	1	1.5456676	1
10	3.2516269	1	2.5152185	1	2.0136170	1	1.6549251	1

	f = 100 kc		f = 200 kc		f = 300 kc		f = 400 kc	
0	1.5179		6.09	1	3.462	- 1	2.25840	- 1
1	3.4787		1.138		6.19	- 1	3.9454	- 1
2	5.08930		1.624		8.45	- 1	5.42	- 1
3	6.48171		2.0564		1.058		6.66	- 1
4	7.739357		2.4494		1.255		7.850	- 1
5	8.902625		2.81407		1.4389		8.973	- 1
6	9.994638		3.15693		1.6124		1.004	
7	1.1030144	1	3.48234		1.7773		1.052	
8	1.2019269	1	3.79336		1.9352		1.2025	
9	1.2969339	1	4.09222		2.08692		2.962	
10	1.3885870	1	4.380621		2.23344		1.3867	

	f = 500 kc		f = 600 kc		f = 700 kc		f = 800 kc	
0	1.588856	- 1	1.185722	1	9.2422268	- 2	7.4442746	- 2
1	2.8016	- 1	2.0957	1	1.63440	- 1	1.31645	- 1
2	3.789	- 1	2.8400	1	2.2162	- 1	1.7852	- 1
3	4.653	- 1	3.496	1	2.7298	- 1	2.1994	- 1
4	5.50	- 1	4.094	1	3.199	- 1	2.5777	- 1
5	6.250	- 1	4.65	1	3.635	- 1	2.930	- 1
6	6.973	- 1	5.20	1	4.046	- 1	3.262	- 1
7	7.666	- 1	5.703	1	4.437	- 1	3.578	- 1
8	8.332	- 1	6.189	1	4.81	- 1	3.881	- 1
9	8.974	- 1	6.660	1	5.188	- 1	4.172	- 1
10	9.5961	- 1	7.116	1	5.538	- 1	4.45	- 1

Table 14.

$|\delta^2 \tau_s|$

$\sigma = 0.005$
$\epsilon_2 = 15$

s	f = 900 kc	f = 1000 kc	f = 1100 kc	f = 1200 kc
0	6.1509039 - 2	5.1866577 - 2	4.4467470 - 2	3.8653537 - 2
1	1.087512 - 1	9.167864 - 2	7.857819 - 2	6.8285856 - 2
2	1.47468 - 1	1.24304 - 1	1.065295 - 1	9.256541 - 2
3	1.8168 - 1	1.53141 - 1	1.31236 - 1	1.14027 - 1
4	2.1295 - 1	1.7950 - 1	1.53820 - 1	1.33646 - 1
5	2.4208 - 1	2.0406 - 1	1.7486 - 1	1.51926 - 1
6	2.6955 - 1	2.2722 - 1	1.9471 - 1	1.6917 - 1
7	2.957 - 1	2.4926 - 1	2.1360 - 1	1.8558 - 1
8	3.207 - 1	2.7036 - 1	2.3169 - 1	2.0130 - 1
9	3.448 - 1	2.907 - 1	2.4910 - 1	2.1643 - 1
10	3.681 - 1	3.103 - 1	2.6593 - 1	2.3105 - 1

	f = 1300 kc	f = 1400 kc	f = 1500 kc	f = 1600 kc
0	3.3993707 - 2	3.0195547 - 2	2.7054743 - 2	2.4424790 - 2
1	6.0038315 - 2	5.3317435 - 2	4.7761071 - 2	4.3109533 - 2
2	8.137660 - 2	7.225982 - 2	6.4723481 - 2	5.8415059 - 2
3	1.00238 - 1	8.900361 - 2	7.971702 - 2	7.194393 - 2
4	1.17481 - 1	1.043102 - 1	9.342366 - 2	8.431163 - 2
5	1.33547 - 1	1.18573 - 1	1.06160 - 1	9.583633 - 2
6	1.48705 - 1	1.32029 - 1	1.18246 - 1	1.067093 - 1
7	1.63130 - 1	1.44835 - 1	1.29713 - 1	1.17057 - 1
8	1.7694 - 1	1.57100 - 1	1.40697 - 1	1.26967 - 1
9	1.9024 - 1	1.68905 - 1	1.51269 - 1	1.36507 - 1
10	2.0309 - 1	1.8031 - 1	1.61484 - 1	1.45725 - 1

	f = 1700 kc	f = 1800 kc	f = 1900 kc	f = 2000 kc
0	2.2198305 - 2	2.0295049 - 2	1.8654012 - 2	1.7228110 - 2
1	3.9172494 - 2	3.5807732 - 2	3.2907132 - 2	3.0387274 - 2
2	5.3076162 - 2	4.8513746 - 2	4.4581050 - 2	4.1164847 - 2
3	6.536580 - 2	5.974467 - 2	5.489962 - 2	5.0691075 - 2
4	7.660065 - 2	7.001166 - 2	6.433255 - 2	5.9399647 - 2
5	8.706973 - 2	7.957886 - 2	7.312255 - 2	6.7514665 - 2
6	9.694679 - 2	8.860507 - 2	8.141550 - 2	7.517082 - 2
7	1.063466 - 1	9.719508 - 2	8.930772 - 2	8.245700 - 2
8	1.15350 - 1	1.054226 - 1	9.686692 - 2	8.943576 - 2
9	1.24015 - 1	1.13342 - 1	1.041431 - 1	9.615318 - 2
10	1.32390 - 1	1.20995 - 1	1.11174 - 1	1.026445 - 1

	f = 2500 kc	f = 3000 kc	f = 3500 kc	f = 4000 kc
0	1.2268524 - 2	9.3880531 - 3	7.5529437 - 3	6.3039121 - 3
1	2.1626683 - 2	1.6542022 - 2	1.3304229 - 2	1.1101291 - 2
2	2.9290291 - 2	2.2400170 - 2	1.8013562 - 2	1.5029419 - 2
3	3.6063920 - 2	2.7577915 - 2	2.2175871 - 2	1.8501239 - 2
4	4.2256097 - 2	3.2311169 - 2	2.5980843 - 2	2.1674987 - 2
5	4.8026214 - 2	3.6721789 - 2	2.9526446 - 2	2.4632389 - 2
6	5.347007 - 2	4.0883004 - 2	3.2871556 - 2	2.7422557 - 2
7	5.8650858 - 2	4.4843146 - 2	3.6055022 - 2	3.0077894 - 2
8	6.3613068 - 2	4.8636203 - 2	3.9104173 - 2	3.2621199 - 2
9	6.8389480 - 2	5.2287243 - 2	4.2039157 - 2	3.5069276 - 2
10	7.3005132 - 2	5.5815391 - 2	4.4875359 - 2	3.7434956 - 2

Table 15.

$|\delta^2 \tau_s|$

$\sigma = 0.005$

$\epsilon_2 = 15$

s	f = 4500 kc	f = 5000 kc	f = 6000 kc	f = 7000 kc
0	5.4102315 - 3	4.7451737 - 3	3.8311782 - 3	3.2388149 - 3
1	9.5255313 - 3	8.3531401 - 3	6.7422925 - 3	5.6985465 - 3
2	1.2895097 - 2	1.1307262 - 2	9.1257981 - 3	7.7124506 - 3
3	1.5873223 - 2	1.3918194 - 2	1.1232391 - 2	9.4923752 - 3
4	1.8595656 - 2	1.6304953 - 2	1.3158109 - 2	1.1119471 - 2
5	2.1132503 - 2	1.8529009 - 2	1.4952549 - 2	1.2635645 - 2
6	2.3525896 - 2	2.0627295 - 2	1.6645512 - 2	1.4066076 - 2
7	2.5803631 - 2	2.2624184 - 2	1.8256664 - 2	1.5427382 - 2
8	2.7985263 - 2	2.4536818 - 2	1.9799837 - 2	1.6731251 - 2
9	3.0085208 - 2	2.6377838 - 2	2.1285228 - 2	1.7986298 - 2
10	3.2114476 - 2	2.8156895 - 2	2.2720623 - 2	1.9199102 - 2

	f = 8000 kc	f = 9000 kc	f = 10000 kc
0	2.8261171 - 3	2.5225011 - 3	2.2895208 - 3
1	4.9714935 - 3	4.4366785 - 3	4.0263288 - 3
2	6.7280043 - 3	6.0038863 - 3	5.4483112 - 3
3	8.2804359 - 3	7.3890065 - 3	6.7050779 - 3
4	9.6995693 - 3	8.6551945 - 3	7.8539313 - 3
5	1.1021957 - 2	9.8350619 - 3	8.9244642 - 3
6	1.2269562 - 2	1.0948206 - 2	9.9344561 - 3
7	1.3456877 - 2	1.2007557 - 2	1.0895639 - 2
8	1.4594093 - 2	1.3022210 - 2	1.1816267 - 2
9	1.5688729 - 2	1.3998871 - 2	1.2702422 - 2
10	1.6746521 - 2	1.4942658 - 2	1.3558752 - 2

Table 16.

σ = 0.005 mhos/meter ϵ_2 = 15

f = 0.1 kilocycles

s	Re τ_s	Im τ_s	$\lvert\tau_s\rvert$	Arg τ_s
0	4.0595375 - 1	6.9984335 - 1	8.0906065 - 1	1.0451649
1	1.2895642	2.2325585	2.5782346	1.0469974
2	1.9132055	3.3130734	3.8258084	1.0471067
3	2.4461822	4.2363677	4.8918931	1.0471420
4	2.9258779	5.0673144	5.8513620	1.0471587
5	3.3688557	5.8346342	6.7373695	1.0471683
6	3.7843213	6.5542851	7.5683380	1.0471744
7	4.1780640	7.2363007	8.3558525	1.0471785
8	4.5540254	7.8875111	9.1077975	1.0471815
9	4.9150419	8.5128314	9.8298490	1.0471838
10	5.2632414	9.1159486	1.0526264 1	1.0471856
11	5.6002723	9.6997185	1.1200339 1	1.0471870
12	5.9274427	1.0266408 1	1.1854692 1	1.0471881
13	6.2458160	1.0817857 1	1.2491447 1	1.0471890
14	6.5562680	1.1355586 1	1.3112360 1	1.0471898
15	6.8595330	1.1880866 1	1.3718899 1	1.0471905
16	7.1562335	1.2394774 1	1.4312306 1	1.0471911
17	7.4469043	1.2898238 1	1.4893654 1	1.0471916
18	7.7320075	1.3392058 1	1.5463867 1	1.0471920
19	8.0119465	1.3876933 1	1.6023750 1	1.0471924
20	8.2870768	1.4353477 1	1.6574014 1	1.0471927
21	8.5577122	1.4822237 1	1.7115290 1	1.0471931
22	8.8241334	1.5283697 1	1.7648137 1	1.0471933
23	9.0865907	1.5738290 1	1.8173054 1	1.0471936
24	9.3453102	1.6186410 1	1.8690498 1	1.0471938
25	9.6004963	1.6628408 1	1.9200872 1	1.0471940
26	9.8523340	1.7064608 1	1.9704552 1	1.0471942
27	1.0100994 1	1.7495302 1	2.0201873 1	1.0471943
28	1.0346628 1	1.7920757 1	2.0693145 1	1.0471945
29	1.0589382 1	1.8341221 1	2.1178655 1	1.0471946
30	1.0829382 1	1.8756918 1	2.1658659 1	1.0471948
31	1.1066753 1	1.9168058 1	2.2133402 1	1.0471949
32	1.1301605 1	1.9574835 1	2.2603107 1	1.0471950
33	1.1534041 1	1.9977429 1	2.3067982 1	1.0471951
34	1.1764157 1	2.0376004 1	2.3528216 1	1.0471952
35	1.1992044 1	2.0770719 1	2.3983993 1	1.0471953
36	1.2217786 1	2.1161717 1	2.4435478 1	1.0471954
37	1.2441462 1	2.1549138 1	2.4882832 1	1.0471955
38	1.2663145 1	2.1933105 1	2.5326199 1	1.0471955
39	1.2882904 1	2.2313740 1	2.5765718 1	1.0471956
40	1.3100804 1	2.2691156 1	2.6201520 1	1.0471956
41	1.3316907 1	2.3065459 1	2.6633727 1	1.0471957
42	1.3531270 1	2.3436748 1	2.7062454 1	1.0471958
43	1.3743948 1	2.3805119 1	2.7487812 1	1.0471958
44	1.3954994 1	2.4170662 1	2.7909905 1	1.0471959
45	1.4164455 1	2.4533461 1	2.8328828 1	1.0471959
46	1.4372379 1	2.4893598 1	2.8744678 1	1.0471960
47	1.4578810 1	2.5251147 1	2.9157540 1	1.0471960
48	1.4783789 1	2.5606183 1	2.9567500 1	1.0471961
49	1.4987356 1	2.5958773 1	2.9974635 1	1.0471961
50	1.5189550 1	2.6308984 1	3.0379024 1	1.0471961

Table 17.

σ = 0.005 mhos/meter ϵ_2 = 15

f = 0.1 kilocycles

s	Re τ_s		Im τ_s		$\lvert\tau_s\rvert$		Arg τ_s
51	1.5390408	1	2.6656882	1	3.0780741	1	1.0471962
52	1.5589964	1	2.7002524	1	3.1179854	1	1.0471962
53	1.5788249	1	2.7345966	1	3.1576426	1	1.0471963
54	1.5985300	1	2.7687267	1	3.1970527	1	1.0471963
55	1.6181139	1	2.8026472	1	3.2362207	1	1.0471963
56	1.6375804	1	2.8363642	1	3.2751538	1	1.0471963
57	1.6569316	1	2.8698817	1	3.3138562	1	1.0471964
58	1.6761708	1	2.9032049	1	3.3523346	1	1.0471964
59	1.6952998	1	2.9363375	1	3.3905927	1	1.0471964
60	1.7143217	1	2.9692845	1	3.4286366	1	1.0471965
61	1.7332385	1	3.0020495	1	3.4664704	1	1.0471965
62	1.7520528	1	3.0346369	1	3.5040991	1	1.0471965
63	1.7707667	1	3.0670503	1	3.5415268	1	1.0471965
64	1.7893819	1	3.0992929	1	3.5787574	1	1.0471965
65	1.8079011	1	3.1313691	1	3.6157958	1	1.0471966
66	1.8263256	1	3.1632815	1	3.6526450	1	1.0471966
67	1.8446578	1	3.1950338	1	3.6893093	1	1.0471966
68	1.8628995	1	3.2266292	1	3.7257927	1	1.0471966
69	1.8810520	1	3.2580706	1	3.7620980	1	1.0471967
70	1.8991177	1	3.2893613	1	3.7982293	1	1.0471967
71	1.9170976	1	3.3205035	1	3.8341891	1	1.0471967
72	1.9349936	1	3.3515004	1	3.8699813	1	1.0471967
73	1.9528075	1	3.3823549	1	3.9056091	1	1.0471967
74	1.9705401	1	3.4130688	1	3.9410744	1	1.0471967
75	1.9881934	1	3.4436453	1	3.9763810	1	1.0471967
76	2.0057689	1	3.4740869	1	4.0115320	1	1.0471967
77	2.0232676	1	3.5043956	1	4.0465295	1	1.0471968
78	2.0406908	1	3.5345735	1	4.0813759	1	1.0471968
79	2.0580402	1	3.5646236	1	4.1160747	1	1.0471968
80	2.0753165	1	3.5945472	1	4.1506276	1	1.0471968
81	2.0925213	1	3.6243467	1	4.1850369	1	1.0471968
82	2.1096557	1	3.6540244	1	4.2193058	1	1.0471968
83	2.1267210	1	3.6835826	1	4.2534366	1	1.0471969
84	2.1437177	1	3.7130217	1	4.2874300	1	1.0471969
85	2.1606476	1	3.7423451	1	4.3212898	1	1.0471969
86	2.1775112	1	3.7715538	1	4.3550170	1	1.0471969
87	2.1943096	1	3.8006496	1	4.3886139	1	1.0471969
88	2.2110444	1	3.8296352	1	4.4220836	1	1.0471969
89	2.2277160	1	3.8585112	1	4.4554268	1	1.0471969
90	2.2443252	1	3.8872793	1	4.4886453	1	1.0471969
91	2.2608732	1	3.9159414	1	4.5217414	1	1.0471969
92	2.2773610	1	3.9444990	1	4.5547168	1	1.0471969
93	2.2937893	1	3.9729537	1	4.5875735	1	1.0471969
94	2.3101592	1	4.0013072	1	4.6203133	1	1.0471970
95	2.3264710	1	4.0295601	1	4.6529369	1	1.0471970
96	2.3427258	1	4.0577144	1	4.6854466	1	1.0471970
97	2.3589245	1	4.0857713	1	4.7178440	1	1.0471970
98	2.3750678	1	4.1137324	1	4.7501307	1	1.0471970
99	2.3911563	1	4.1415985	1	4.7823077	1	1.0471970
100	2.4071909	1	4.1693713	1	4.8143769	1	1.0471970

Table 18.

σ = 0.005 mhos/meter ϵ_2 = 15

f = 0.2 kilocycles

s	Re τ_s	Im τ_s	$\lvert\tau_s\rvert$	Arg τ_s
0	4.0724019 - 1	6.9950260 - 1	8.0941240 - 1	1.0435788
1	1.2899677	2.2324505	2.5783429	1.0468409
2	1.9134774	3.3130007	3.8258816	1.0470356
3	2.4463948	4.2363107	4.8919501	1.0470985
4	2.9260557	5.0672667	5.8514095	1.0471283
5	3.3690101	5.8345928	6.7374105	1.0471454
6	3.7844588	6.5542483	7.5683750	1.0471562
7	4.1781885	7.2362674	8.3558855	1.0471636
8	4.5541396	7.8874605	9.1078285	1.0471690
9	4.9151477	8.5128031	9.8298775	1.0471731
10	5.2633402	9.1159222	1.0526291 1	1.0471762
11	5.6003652	9.6996936	1.1200364 1	1.0471787
12	5.9275305	1.0266384 1	1.1854715 1	1.0471807
13	6.2458993	1.0817835 1	1.2491470 1	1.0471824
14	6.5563473	1.1355565 1	1.3112382 1	1.0471838
15	6.8596088	1.1880846 1	1.3718919 1	1.0471850
16	7.1563061	1.2394755 1	1.4312326 1	1.0471860
17	7.4469742	1.2898219 1	1.4893673 1	1.0471869
18	7.7320748	1.3392040 1	1.5463885 1	1.0471877
19	8.0120115	1.3876915 1	1.6023767 1	1.0471884
20	8.2871395	1.4353461 1	1.6574032 1	1.0471890
21	8.5577730	1.4822221 1	1.7115307 1	1.0471895
22	8.8241923	1.5283681 1	1.7648152 1	1.0471900
23	9.0866480	1.5738275 1	1.8173070 1	1.0471904
24	9.3453658	1.6186395 1	1.8690512 1	1.0471908
25	9.6005505	1.6628394 1	1.9200887 1	1.0471912
26	9.8523868	1.7064594 1	1.9704566 1	1.0471915
27	1.0101045 1	1.7495289 1	2.0201888 1	1.0471918
28	1.0346679 1	1.7920743 1	2.0693159 1	1.0471920
29	1.0589431 1	1.8341208 1	2.1178668 1	1.0471923
30	1.0829430 1	1.8756905 1	2.1658671 1	1.0471926
31	1.1066800 1	1.9168045 1	2.2133414 1	1.0471927
32	1.1301651 1	1.9574823 1	2.2603120 1	1.0471929
33	1.1534086 1	1.9977416 1	2.3067993 1	1.0471931
34	1.1764201 1	2.0375992 1	2.3528228 1	1.0471933
35	1.1992088 1	2.0770708 1	2.3984005 1	1.0471935
36	1.2217829 1	2.1161706 1	2.4435490 1	1.0471936
37	1.2441504 1	2.1549126 1	2.4882843 1	1.0471938
38	1.2663186 1	2.1933094 1	2.5326210 1	1.0471939
39	1.2882944 1	2.2313729 1	2.5765728 1	1.0471940
40	1.3100843 1	2.2691146 1	2.6201531 1	1.0471942
41	1.3316946 1	2.3065448 1	2.6633737 1	1.0471942
42	1.3531309 1	2.3436738 1	2.7062465 1	1.0471943
43	1.3743986 1	2.3805109 1	2.7487822 1	1.0471944
44	1.3955031 1	2.4170652 1	2.7909914 1	1.0471945
45	1.4164492 1	2.4533452 1	2.8328839 1	1.0471946
46	1.4372415 1	2.4893588 1	2.8744687 1	1.0471947
47	1.4578845 1	2.5251137 1	2.9157549 1	1.0471948
48	1.4783824 1	2.5606174 1	2.9567509 1	1.0471949
49	1.4987391 1	2.5958764 1	2.9974645 1	1.0471949
50	1.5189584 1	2.6308975 1	3.0379033 1	1.0471950

Table 19.

σ = 0.005 mhos/meter ϵ_2 = 15

f = 0.2 kilocycles

s	Re τ_s		Im τ_s		$\lvert\tau_s\rvert$		Arg τ_s
51	1.5390442	1	2.6656873	1	3.0780750	1	1.0471951
52	1.5589997	1	2.7002515	1	3.1179863	1	1.0471952
53	1.5788282	1	2.7345957	1	3.1576435	1	1.0471952
54	1.5985332	1	2.7687258	1	3.1970535	1	1.0471953
55	1.6181171	1	2.8026463	1	3.2362214	1	1.0471953
56	1.6375835	1	2.8363634	1	3.2751545	1	1.0471954
57	1.6569348	1	2.8698809	1	3.3138571	1	1.0471954
58	1.6761739	1	2.9032041	1	3.3523355	1	1.0471955
59	1.6953029	1	2.9363367	1	3.3905936	1	1.0471955
60	1.7143247	1	2.9692836	1	3.4286374	1	1.0471956
61	1.7332415	1	3.0020487	1	3.4664713	1	1.0471956
62	1.7520558	1	3.0346361	1	3.5040999	1	1.0471957
63	1.7707696	1	3.0670495	1	3.5415277	1	1.0471957
64	1.7893848	1	3.0992921	1	3.5787582	1	1.0471957
65	1.8079040	1	3.1313683	1	3.6157965	1	1.0471958
66	1.8263285	1	3.1632808	1	3.6526458	1	1.0471958
67	1.8446606	1	3.1950331	1	3.6893103	1	1.0471959
68	1.8629023	1	3.2266285	1	3.7257934	1	1.0471959
69	1.8810548	1	3.2580698	1	3.7620986	1	1.0471959
70	1.8991204	1	3.2893605	1	3.7982299	1	1.0471959
71	1.9171003	1	3.3205027	1	3.8341899	1	1.0471960
72	1.9349963	1	3.3514997	1	3.8699821	1	1.0471960
73	1.9528102	1	3.3823542	1	3.9056098	1	1.0471960
74	1.9705427	1	3.4130681	1	3.9410751	1	1.0471961
75	1.9881961	1	3.4436446	1	3.9763818	1	1.0471961
76	2.0057715	1	3.4740862	1	4.0115326	1	1.0471961
77	2.0232702	1	3.5043949	1	4.0465301	1	1.0471961
78	2.0406933	1	3.5345728	1	4.0813765	1	1.0471962
79	2.0580428	1	3.5646230	1	4.1160755	1	1.0471962
80	2.0753190	1	3.5945466	1	4.1506282	1	1.0471962
81	2.0925238	1	3.6243461	1	4.1850378	1	1.0471962
82	2.1096581	1	3.6540237	1	4.2193064	1	1.0471962
83	2.1267235	1	3.6835819	1	4.2534373	1	1.0471963
84	2.1437201	1	3.7130210	1	4.2874306	1	1.0471963
85	2.1606500	1	3.7423444	1	4.3212903	1	1.0471963
86	2.1775135	1	3.7715531	1	4.3550176	1	1.0471963
87	2.1943120	1	3.8006490	1	4.3886146	1	1.0471964
88	2.2110468	1	3.8296346	1	4.4220843	1	1.0471964
89	2.2277183	1	3.8585106	1	4.4554274	1	1.0471964
90	2.2443275	1	3.8872787	1	4.4886459	1	1.0471964
91	2.2608755	1	3.9159408	1	4.5217419	1	1.0471964
92	2.2773633	1	3.9444984	1	4.5547176	1	1.0471964
93	2.2937916	1	3.9729531	1	4.5875741	1	1.0471964
94	2.3101614	1	4.0013066	1	4.6203140	1	1.0471965
95	2.3264732	1	4.0295595	1	4.6529376	1	1.0471965
96	2.3427281	1	4.0577138	1	4.6854473	1	1.0471965
97	2.3589267	1	4.0857708	1	4.7178447	1	1.0471965
98	2.3750700	1	4.1137319	1	4.7501314	1	1.0471965
99	2.3911585	1	4.1415979	1	4.7823083	1	1.0471965
100	2.4071930	1	4.1693707	1	4.8143775	1	1.0471966

Table 20.

σ = 0.005 mhos/meter ϵ_2 = 15

f = 0.5 kilocycles

s	Re τ_s	Im τ_s	$\lvert\tau_s\rvert$	Arg τ_s
0	4.1059999 - 1	6.9862308 - 1	8.1034965 - 1	1.0394496
1	1.2910215	2.2321688	2.5786264	1.0464325
2	1.9141876	3.3128105	3.8260720	1.0468500
3	2.4469502	4.2361621	4.8920992	1.0469850
4	2.9265200	5.0671425	5.8515340	1.0470490
5	3.3694133	5.8344848	6.7375190	1.0470855
6	3.7848177	6.5541521	7.5684710	1.0471088
7	4.1785137	7.2361803	8.3559730	1.0471247
8	4.5544379	7.8874005	9.1079080	1.0471363
9	4.9154241	8.5127290	9.8299515	1.0471449
10	5.2635983	9.1158530	1.0526360 1	1.0471517
11	5.6006077	9.6996286	1.1200429 1	1.0471570
12	5.9277597	1.0266323 1	1.1854777 1	1.0471614
13	6.2461168	1.0817777 1	1.2491529 1	1.0471650
14	6.5565545	1.1355509 1	1.3112437 1	1.0471680
15	6.8598069	1.1880793 1	1.3718972 1	1.0471706
16	7.1564960	1.2394704 1	1.4312377 1	1.0471728
17	7.4471566	1.2898170 1	1.4893721 1	1.0471746
18	7.7322505	1.3391993 1	1.5463932 1	1.0471763
19	8.0121810	1.3876870 1	1.6023813 1	1.0471778
20	8.2873035	1.4353417 1	1.6574076 1	1.0471791
21	8.5579318	1.4822178 1	1.7115349 1	1.0471802
22	8.8243463	1.5283640 1	1.7648194 1	1.0471813
23	9.0867975	1.5738235 1	1.8173110 1	1.0471822
24	9.3455112	1.6186356 1	1.8690551 1	1.0471830
25	9.6006920	1.6628356 1	1.9200925 1	1.0471838
26	9.8525247	1.7064557 1	1.9704603 1	1.0471845
27	1.0101180 1	1.7495253 1	2.0201924 1	1.0471851
28	1.0346810 1	1.7920708 1	2.0693194 1	1.0471857
29	1.0589559 1	1.8341174 1	2.1178702 1	1.0471863
30	1.0829556 1	1.8756871 1	2.1658705 1	1.0471867
31	1.1066923 1	1.9168012 1	2.2133447 1	1.0471872
32	1.1301771 1	1.9574791 1	2.2603152 1	1.0471876
33	1.1534204 1	1.9977385 1	2.3068025 1	1.0471880
34	1.1764316 1	2.0375961 1	2.3528258 1	1.0471884
35	1.1992201 1	2.0770677 1	2.3984035 1	1.0471887
36	1.2217940 1	2.1161676 1	2.4435519 1	1.0471891
37	1.2441613 1	2.1549097 1	2.4882872 1	1.0471894
38	1.2663293 1	2.1933065 1	2.5326238 1	1.0471897
39	1.2883049 1	2.2313701 1	2.5765757 1	1.0471899
40	1.3100947 1	2.2691118 1	2.6201558 1	1.0471902
41	1.3317048 1	2.3065421 1	2.6633765 1	1.0471904
42	1.3531409 1	2.3436711 1	2.7062492 1	1.0471906
43	1.3744085 1	2.3805082 1	2.7487848 1	1.0471908
44	1.3955128 1	2.4170626 1	2.7909940 1	1.0471911
45	1.4164588 1	2.4533426 1	2.8328864 1	1.0471912
46	1.4372510 1	2.4893563 1	2.8744713 1	1.0471914
47	1.4578938 1	2.5251112 1	2.9157574 1	1.0471916
48	1.4783916 1	2.5606149 1	2.9567534 1	1.0471918
49	1.4987482 1	2.5958740 1	2.9974670 1	1.0471919
50	1.5189673 1	2.6308951 1	3.0379057 1	1.0471921

Table 21.

σ = 0.005 mhos/meter ϵ_2 = 15

f = 0.5 kilocycles

s	Re τ_s		Im τ_s		$\lvert\tau_s\rvert$		Arg τ_s
51	1.5390530	1	2.6656850	1	3.0780774	1	1.0471922
52	1.5590084	1	2.7002491	1	3.1179885	1	1.0471924
53	1.5788368	1	2.7345934	1	3.1576458	1	1.0471925
54	1.5985417	1	2.7687235	1	3.1970557	1	1.0471926
55	1.6181255	1	2.8026441	1	3.2362238	1	1.0471927
56	1.6375918	1	2.8363611	1	3.2751567	1	1.0471928
57	1.6569430	1	2.8698787	1	3.3138594	1	1.0471929
58	1.6761820	1	2.9032019	1	3.3523376	1	1.0471930
59	1.6953109	1	2.9363346	1	3.3905958	1	1.0471932
60	1.7143326	1	2.9692815	1	3.4286396	1	1.0471933
61	1.7332494	1	3.0020466	1	3.4664733	1	1.0471933
62	1.7520635	1	3.0346340	1	3.5041019	1	1.0471935
63	1.7707773	1	3.0670475	1	3.5415298	1	1.0471935
64	1.7893924	1	3.0992901	1	3.5787601	1	1.0471936
65	1.8079115	1	3.1313663	1	3.6157986	1	1.0471937
66	1.8263359	1	3.1632788	1	3.6526478	1	1.0471938
67	1.8446680	1	3.1950311	1	3.6893122	1	1.0471938
68	1.8629096	1	3.2266265	1	3.7257954	1	1.0471939
69	1.8810620	1	3.2580679	1	3.7621005	1	1.0471940
70	1.8991276	1	3.2893586	1	3.7982320	1	1.0471940
71	1.9171074	1	3.3205008	1	3.8341919	1	1.0471941
72	1.9350033	1	3.3514978	1	3.8699840	1	1.0471942
73	1.9528171	1	3.3823523	1	3.9056116	1	1.0471942
74	1.9705496	1	3.4130662	1	3.9410769	1	1.0471943
75	1.9882029	1	3.4436428	1	3.9763837	1	1.0471944
76	2.0057783	1	3.4740844	1	4.0115345	1	1.0471944
77	2.0232769	1	3.5043931	1	4.0465319	1	1.0471945
78	2.0407000	1	3.5345711	1	4.0813785	1	1.0471945
79	2.0580494	1	3.5646212	1	4.1160772	1	1.0471946
80	2.0753256	1	3.5945448	1	4.1506299	1	1.0471946
81	2.0925303	1	3.6243443	1	4.1850395	1	1.0471947
82	2.1096646	1	3.6540220	1	4.2193083	1	1.0471947
83	2.1267299	1	3.6835802	1	4.2534390	1	1.0471948
84	2.1437265	1	3.7130193	1	4.2874322	1	1.0471948
85	2.1606563	1	3.7423427	1	4.3212921	1	1.0471948
86	2.1775198	1	3.7715515	1	4.3550194	1	1.0471949
87	2.1943182	1	3.8006473	1	4.3886162	1	1.0471949
88	2.2110529	1	3.8296329	1	4.4220858	1	1.0471950
89	2.2277244	1	3.8585089	1	4.4554290	1	1.0471950
90	2.2443335	1	3.8872771	1	4.4886475	1	1.0471951
91	2.2608816	1	3.9159392	1	4.5217437	1	1.0471951
92	2.2773693	1	3.9444968	1	4.5547191	1	1.0471951
93	2.2937975	1	3.9729515	1	4.5875757	1	1.0471952
94	2.3101673	1	4.0013051	1	4.6203156	1	1.0471952
95	2.3264790	1	4.0295580	1	4.6529392	1	1.0471952
96	2.3427339	1	4.0577123	1	4.6854489	1	1.0471953
97	2.3589325	1	4.0857692	1	4.7178462	1	1.0471953
98	2.3750757	1	4.1137303	1	4.7501329	1	1.0471953
99	2.3911641	1	4.1415963	1	4.7823097	1	1.0471954
100	2.4071987	1	4.1693692	1	4.8143791	1	1.0471954

Table 22.

σ = 0.005 mhos/meter ϵ_2 = 15

f = 1 kilocycle

s	Re τ_s	Im τ_s	$\lvert\tau_s\rvert$	Arg τ_s
0	4.1551874 - 1	6.9736279 - 1	8.1177010 - 1	1.0334391
1	1.2925645	2.2317575	2.5790434	1.0458347
2	1.9152273	3.3125327	3.8263519	1.0465784
3	2.4477633	4.2359446	4.8923177	1.0468189
4	2.9271998	5.0669605	5.8517165	1.0469329
5	3.3700037	5.8343268	6.7376770	1.0469979
6	3.7853433	6.5540115	7.5686120	1.0470393
7	4.1789897	7.2360529	8.3561005	1.0470677
8	4.5548746	7.8872837	9.1080255	1.0470883
9	4.9158287	8.5126207	9.8300600	1.0471038
10	5.2639762	9.1157518	1.0526461 1	1.0471158
11	5.6009629	9.6995335	1.1200524 1	1.0471253
12	5.9280952	1.0266233 1	1.1854866 1	1.0471331
13	6.2464352	1.0817692 1	1.2491614 1	1.0471395
14	6.5568579	1.1355428 1	1.3112519 1	1.0471449
15	6.8600968	1.1880715 1	1.3719050 1	1.0471494
16	7.1567739	1.2394629 1	1.4312451 1	1.0471533
17	7.4474237	1.2898099 1	1.4893794 1	1.0471567
18	7.7325077	1.3391924 1	1.5464001 1	1.0471597
19	8.0124292	1.3876803 1	1.6023879 1	1.0471623
20	8.2875435	1.4353352 1	1.6574139 1	1.0471646
21	8.5581642	1.4822116 1	1.7115411 1	1.0471666
22	8.8245717	1.5283579 1	1.7648254 1	1.0471685
23	9.0870163	1.5738176 1	1.8173169 1	1.0471701
24	9.3457240	1.6186299 1	1.8690609 1	1.0471716
25	9.6008991	1.6628301 1	1.9200981 1	1.0471730
26	9.8527266	1.7064503 1	1.9704657 1	1.0471742
27	1.0101377 1	1.7495200 1	2.0201976 1	1.0471754
28	1.0347002 1	1.7920657 1	2.0693246 1	1.0471764
29	1.0589747 1	1.8341123 1	2.1178752 1	1.0471774
30	1.0829740 1	1.8756822 1	2.1658755 1	1.0471782
31	1.1067103 1	1.9167964 1	2.2133495 1	1.0471791
32	1.1301947 1	1.9574744 1	2.2603199 1	1.0471798
33	1.1534376 1	1.9977339 1	2.3068071 1	1.0471805
34	1.1764485 1	2.0375916 1	2.3528304 1	1.0471812
35	1.1992367 1	2.0770633 1	2.3984080 1	1.0471818
36	1.2218103 1	2.1161633 1	2.4435563 1	1.0471824
37	1.2441773 1	2.1549054 1	2.4882915 1	1.0471829
38	1.2663450 1	2.1933023 1	2.5326280 1	1.0471835
39	1.2883204 1	2.2313660 1	2.5765799 1	1.0471839
40	1.3101099 1	2.2691077 1	2.6201599 1	1.0471844
41	1.3317197 1	2.3065381 1	2.6633805 1	1.0471848
42	1.3531556 1	2.3436671 1	2.7062531 1	1.0471852
43	1.3744230 1	2.3805044 1	2.7487888 1	1.0471856
44	1.3955271 1	2.4170588 1	2.7909979 1	1.0471859
45	1.4164728 1	2.4533388 1	2.8328902 1	1.0471863
46	1.4372648 1	2.4893526 1	2.8744750 1	1.0471866
47	1.4579075 1	2.5251076 1	2.9157611 1	1.0471869
48	1.4784051 1	2.5606113 1	2.9567570 1	1.0471872
49	1.4987614 1	2.5958704 1	2.9974704 1	1.0471875
50	1.5189804 1	2.6308916 1	3.0379092 1	1.0471878

Table 23.

σ = 0.005 mhos/meter ϵ_2 = 15

f = 2 kilocycles

s	Re τ_s	Im τ_s	$\lvert\tau_s\rvert$	Arg τ_s
0	4.2428214 - 1	6.9519765 - 1	8.1444160 - 1	1.0228346
1	1.2953139	2.2310274	2.5797910	1.0447706
2	1.9170801	3.3120387	3.8268520	1.0460947
3	2.4492123	4.2355577	4.8927079	1.0465229
4	2.9284112	5.0666368	5.8520425	1.0467260
5	3.3710558	5.8340456	6.7379600	1.0468418
6	3.7862799	6.5537610	7.5688635	1.0469156
7	4.1798379	7.2358260	8.3563285	1.0469663
8	4.5556528	7.8870755	9.1082345	1.0470029
9	4.9165498	8.5124278	9.8302540	1.0470304
10	5.2646495	9.1155717	1.0526642 1	1.0470518
11	5.6015957	9.6993642	1.1200694 1	1.0470688
12	5.9286931	1.0266073 1	1.1855027 1	1.0470827
13	6.2470026	1.0817540 1	1.2491766 1	1.0470941
14	6.5573984	1.1355283 1	1.3112663 1	1.0471036
15	6.8606134	1.1880577 1	1.3719189 1	1.0471118
16	7.1572691	1.2394497 1	1.4312584 1	1.0471187
17	7.4478995	1.2897972 1	1.4893921 1	1.0471248
18	7.7329661	1.3391801 1	1.5464123 1	1.0471300
19	8.0128716	1.3876685 1	1.6023998 1	1.0471347
20	8.2879711	1.4353238 1	1.6574255 1	1.0471388
21	8.5585783	1.4822005 1	1.7115522 1	1.0471425
22	8.8249733	1.5283472 1	1.7648362 1	1.0471457
23	9.0874063	1.5738072 1	1.8173273 1	1.0471487
24	9.3461032	1.6186198 1	1.8690711 1	1.0471514
25	9.6012683	1.6628202 1	1.9201080 1	1.0471538
26	9.8530863	1.7064407 1	1.9704753 1	1.0471560
27	1.0101728 1	1.7495106 1	2.0202070 1	1.0471580
28	1.0347345 1	1.7920565 1	2.0693337 1	1.0471598
29	1.0590082 1	1.8341034 1	2.1178843 1	1.0471616
30	1.0830067 1	1.8756734 1	2.1658842 1	1.0471631
31	1.1067423 1	1.9167879 1	2.2133582 1	1.0471646
32	1.1302261 1	1.9574660 1	2.2603283 1	1.0471660
33	1.1534683 1	1.9977257 1	2.3068154 1	1.0471672
34	1.1764787 1	2.0375835 1	2.3528384 1	1.0471684
35	1.1992662 1	2.0770554 1	2.3984159 1	1.0471695
36	1.2218393 1	2.1161555 1	2.4435641 1	1.0471705
37	1.2442058 1	2.1548978 1	2.4882992 1	1.0471715
38	1.2663730 1	2.1932948 1	2.5326355 1	1.0471724
39	1.2883479 1	2.2313586 1	2.5765872 1	1.0471733
40	1.3101369 1	2.2691005 1	2.6201672 1	1.0471741
41	1.3317463 1	2.3065310 1	2.6633876 1	1.0471748
42	1.3531818 1	2.3436601 1	2.7062601 1	1.0471755
43	1.3744488 1	2.3804975 1	2.7487957 1	1.0471762
44	1.3955525 1	2.4170520 1	2.7910047 1	1.0471768
45	1.4164978 1	2.4533321 1	2.8328968 1	1.0471775
46	1.4372895 1	2.4893460 1	2.8744816 1	1.0471780
47	1.4579318 1	2.5251011 1	2.9157676 1	1.0471786
48	1.4784290 1	2.5606049 1	2.9567634 1	1.0471791
49	1.4987851 1	2.5958641 1	2.9974768 1	1.0471796
50	1.5190038 1	2.6308854 1	3.0379155 1	1.0471801

Table 24.

σ = 0.005 mhos/meter ϵ_2 = 15

f = 3 kilocycles

s	Re τ_s	Im τ_s	$\lvert\tau_s\rvert$	Arg τ_s
0	4.3230922 - 1	6.9330445 - 1	8.1704485 - 1	1.0132412
1	1.2978335	2.2303618	2.5804817	1.0437967
2	1.9187779	3.3115873	3.8273123	1.0456517
3	2.4505400	4.2352039	4.8930663	1.0462518
4	2.9295210	5.0663409	5.8523415	1.0465365
5	3.3720198	5.8337883	6.7382195	1.0466988
6	3.7871379	6.5535319	7.5690945	1.0468023
7	4.1806152	7.2356185	8.3565375	1.0468733
8	4.5563659	7.8868851	9.1084260	1.0469247
9	4.9172105	8.5122513	9.8304315	1.0469633
10	5.2652665	9.1154068	1.0526807 1	1.0469932
11	5.6021756	9.6992093	1.1200850 1	1.0470171
12	5.9292409	1.0265927 1	1.1855175 1	1.0470365
13	6.2475226	1.0817401 1	1.2491906 1	1.0470525
14	6.5578936	1.1355151 1	1.3112796 1	1.0470659
15	6.8610868	1.1880450 1	1.3719315 1	1.0470773
16	7.1577228	1.2394375 1	1.4312705 1	1.0470870
17	7.4483356	1.2897855 1	1.4894038 1	1.0470955
18	7.7333860	1.3391689 1	1.5464236 1	1.0471029
19	8.0132768	1.3876577 1	1.6024107 1	1.0471094
20	8.2883629	1.4353133 1	1.6574360 1	1.0471151
21	8.5589577	1.4821904 1	1.7115625 1	1.0471203
22	8.8253412	1.5283374 1	1.7648461 1	1.0471249
23	9.0877637	1.5737976 1	1.8173369 1	1.0471290
24	9.3464507	1.6186105 1	1.8690804 1	1.0471328
25	9.6016065	1.6628111 1	1.9201170 1	1.0471362
26	9.8534158	1.7064318 1	1.9704841 1	1.0471393
27	1.0102049 1	1.7495020 1	2.0202156 1	1.0471421
28	1.0347658 1	1.7920481 1	2.0693421 1	1.0471447
29	1.0590388 1	1.8340952 1	2.1178925 1	1.0471471
30	1.0830367 1	1.8756654 1	2.1658923 1	1.0471493
31	1.1067716 1	1.9167800 1	2.2133660 1	1.0471514
32	1.1302548 1	1.9574583 1	2.2603360 1	1.0471533
33	1.1534965 1	1.9977181 1	2.3068229 1	1.0471550
34	1.1765063 1	2.0375761 1	2.3528459 1	1.0471567
35	1.1992933 1	2.0770481 1	2.3984231 1	1.0471582
36	1.2218659 1	2.1161484 1	2.4435713 1	1.0471597
37	1.2442319 1	2.1548908 1	2.4883062 1	1.0471610
38	1.2663986 1	2.1932880 1	2.5326425 1	1.0471623
39	1.2883731 1	2.2313519 1	2.5765940 1	1.0471635
40	1.3101617 1	2.2690939 1	2.6201738 1	1.0471646
41	1.3317707 1	2.3065244 1	2.6633941 1	1.0471657
42	1.3532058 1	2.3436537 1	2.7062666 1	1.0471666
43	1.3744724 1	2.3804911 1	2.7488020 1	1.0471676
44	1.3955757 1	2.4170458 1	2.7910109 1	1.0471685
45	1.4165207 1	2.4533260 1	2.8329030 1	1.0471694
46	1.4373121 1	2.4893399 1	2.8744877 1	1.0471702
47	1.4579541 1	2.5250951 1	2.9157736 1	1.0471709
48	1.4784510 1	2.5605990 1	2.9567693 1	1.0471717
49	1.4988068 1	2.5958583 1	2.9974827 1	1.0471724
50	1.5190251 1	2.6308796 1	3.0379212 1	1.0471731

Table 25.

σ = 0.005 mhos/meter ϵ_2 = 15

f = 4 kilocycles

s	Re τ_s	Im τ_s	$\lvert\tau_s\rvert$	Arg τ_s
0	4.3989147 - 1	6.9159502 - 1	8.1963905 - 1	1.0042879
1	1.3002147	2.2297361	2.5811396	1.0428774
2	1.9203822	3.3111618	3.8277487	1.0452333
3	2.4517947	4.2348703	4.8934061	1.0459957
4	2.9305700	5.0660614	5.8526250	1.0463574
5	3.3729307	5.8335456	6.7384655	1.0465638
6	3.7879488	6.5533157	7.5693135	1.0466953
7	4.1813496	7.2354226	8.3567355	1.0467855
8	4.5570397	7.8867053	9.1086075	1.0468507
9	4.9178348	8.5120847	9.8305995	1.0468998
10	5.2658496	9.1152513	1.0526965 1	1.0469379
11	5.6027234	9.6990630	1.1200997 1	1.0469682
12	5.9297585	1.0265788 1	1.1855313 1	1.0469928
13	6.2480138	1.0817269 1	1.2492037 1	1.0470131
14	6.5583617	1.1355026 1	1.3112923 1	1.0470302
15	6.8615341	1.1880331 1	1.3719436 1	1.0470447
16	7.1581516	1.2394261 1	1.4312821 1	1.0470571
17	7.4487476	1.2897745 1	1.4894149 1	1.0470679
18	7.7337829	1.3391583 1	1.5464343 1	1.0470772
19	8.0136598	1.3876474 1	1.6024209 1	1.0470855
20	8.2887332	1.4353034 1	1.6574459 1	1.0470928
21	8.5593163	1.4821808 1	1.7115721 1	1.0470993
22	8.8256890	1.5283281 1	1.7648555 1	1.0471052
23	9.0881014	1.5737886 1	1.8173460 1	1.0471104
24	9.3467790	1.6186017 1	1.8690892 1	1.0471152
25	9.6019260	1.6628026 1	1.9201256 1	1.0471195
26	9.8537272	1.7064235 1	1.9704925 1	1.0471235
27	1.0102353 1	1.7494939 1	2.0202238 1	1.0471270
28	1.0347955 1	1.7920402 1	2.0693501 1	1.0471304
29	1.0590678 1	1.8340874 1	2.1179002 1	1.0471334
30	1.0830650 1	1.8756578 1	2.1658998 1	1.0471362
31	1.1067993 1	1.9167726 1	2.2133734 1	1.0471389
32	1.1302819 1	1.9574510 1	2.2603433 1	1.0471413
33	1.1535231 1	1.9977110 1	2.3068300 1	1.0471435
34	1.1765323 1	2.0375692 1	2.3528529 1	1.0471456
35	1.1993189 1	2.0770413 1	2.3984300 1	1.0471476
36	1.2218910 1	2.1161417 1	2.4435780 1	1.0471494
37	1.2442566 1	2.1548842 1	2.4883128 1	1.0471511
38	1.2664228 1	2.1932815 1	2.5326489 1	1.0471528
39	1.2883969 1	2.2313455 1	2.5766004 1	1.0471542
40	1.3101852 1	2.2690876 1	2.6201801 1	1.0471557
41	1.3317938 1	2.3065183 1	2.6634004 1	1.0471570
42	1.3532285 1	2.3436476 1	2.7062726 1	1.0471583
43	1.3744947 1	2.3804852 1	2.7488080 1	1.0471595
44	1.3955977 1	2.4170399 1	2.7910168 1	1.0471606
45	1.4165424 1	2.4533202 1	2.8329088 1	1.0471617
46	1.4373334 1	2.4893342 1	2.8744934 1	1.0471628
47	1.4579751 1	2.5250895 1	2.9157792 1	1.0471637
48	1.4784717 1	2.5605935 1	2.9567749 1	1.0471647
49	1.4988272 1	2.5958528 1	2.9974881 1	1.0471656
50	1.5190453 1	2.6308742 1	3.0379266 1	1.0471664

Table 26.

σ = 0.005 mhos/meter ϵ_2 = 15

f = 5 kilocycles

s	Re τ_s	Im τ_s	$\lvert\tau_s\rvert$	Arg τ_s
0	4.4715822 - 1	6.9002843 - 1	8.2224675 - 1	9.9580820 - 1
1	1.3024985	2.2291390	2.5817752	1.0419968
2	1.9219209	3.3107550	3.8281692	1.0448323
3	2.4529978	4.2345510	4.8937328	1.0457502
4	2.9315758	5.0657941	5.8528975	1.0461858
5	3.3738042	5.8333132	6.7387015	1.0464343
6	3.7887264	6.5531087	7.5695235	1.0465927
7	4.1820539	7.2352349	8.3569250	1.0467013
8	4.5576858	7.8865332	9.1087820	1.0467799
9	4.9184334	8.5119252	9.8307610	1.0468390
10	5.2664085	9.1151023	1.0527115 1	1.0468848
11	5.6032487	9.6989231	1.1201139 1	1.0469214
12	5.9302549	1.0265656 1	1.1855447 1	1.0469510
13	6.2484848	1.0817144 1	1.2492164 1	1.0469755
14	6.5588104	1.1354906 1	1.3113043 1	1.0469960
15	6.8619630	1.1880216 1	1.3719551 1	1.0470135
16	7.1585627	1.2394151 1	1.4312931 1	1.0470284
17	7.4491426	1.2897639 1	1.4894255 1	1.0470413
18	7.7341633	1.3391481 1	1.5464445 1	1.0470526
19	8.0140270	1.3876376 1	1.6024308 1	1.0470626
20	8.2890882	1.4352940 1	1.6574555 1	1.0470714
21	8.5596600	1.4821716 1	1.7115813 1	1.0470793
22	8.8260224	1.5283192 1	1.7648644 1	1.0470863
23	9.0884251	1.5737800 1	1.8173548 1	1.0470926
24	9.3470938	1.6185933 1	1.8690976 1	1.0470984
25	9.6022325	1.6627944 1	1.9201338 1	1.0471036
26	9.8540259	1.7064155 1	1.9705005 1	1.0471083
27	1.0102644 1	1.7494861 1	2.0202316 1	1.0471126
28	1.0348239 1	1.7920326 1	2.0693577 1	1.0471166
29	1.0590956 1	1.8340800 1	2.1179077 1	1.0471203
30	1.0830922 1	1.8756506 1	2.1659072 1	1.0471237
31	1.1068259 1	1.9167655 1	2.2133806 1	1.0471268
32	1.1303080 1	1.9574441 1	2.2603504 1	1.0471297
33	1.1535486 1	1.9977042 1	2.3068369 1	1.0471324
34	1.1765573 1	2.0375625 1	2.3528596 1	1.0471350
35	1.1993434 1	2.0770347 1	2.3984365 1	1.0471373
36	1.2219151 1	2.1161353 1	2.4435845 1	1.0471395
37	1.2442802 1	2.1548779 1	2.4883191 1	1.0471416
38	1.2664461 1	2.1932753 1	2.5326552 1	1.0471436
39	1.2884197 1	2.2313394 1	2.5766065 1	1.0471454
40	1.3102076 1	2.2690816 1	2.6201861 1	1.0471471
41	1.3318159 1	2.3065124 1	2.6634063 1	1.0471487
42	1.3532502 1	2.3436418 1	2.7062785 1	1.0471502
43	1.3745161 1	2.3804795 1	2.7488138 1	1.0471517
44	1.3956188 1	2.4170343 1	2.7910225 1	1.0471531
45	1.4165632 1	2.4533147 1	2.8329145 1	1.0471544
46	1.4373539 1	2.4893287 1	2.8744989 1	1.0471556
47	1.4579953 1	2.5250841 1	2.9157847 1	1.0471568
48	1.4784916 1	2.5605881 1	2.9567802 1	1.0471579
49	1.4988468 1	2.5958476 1	2.9974934 1	1.0471590
50	1.5190647 1	2.6308691 1	3.0379319 1	1.0471600

Table 27.

σ = 0.005 mhos/meter ϵ_2 = 15

s	Re τ_s	Im τ_s	$\lvert\tau_s\rvert$	Arg τ_s
		f = 6 kilocycles		
0	4.5418206 - 1	6.8858076 - 1	8.2487865 - 1	9.8770788 - 1
1	1.3047075	2.2285643	2.5823944	1.0411459
2	1.9234091	3.3103628	3.8285774	1.0444447
3	2.4541615	4.2342429	4.8940497	1.0455129
4	2.9325486	5.0655361	5.8531615	1.0460198
5	3.3746489	5.8330888	6.7389300	1.0463091
6	3.7894783	6.5529087	7.5697265	1.0464935
7	4.1827350	7.2350538	8.3571095	1.0466199
8	4.5583107	7.8863669	9.1089505	1.0467113
9	4.9190123	8.5117710	9.8309170	1.0467801
10	5.2669491	9.1149583	1.0527261 1	1.0468335
11	5.6037569	9.6987876	1.1201276 1	1.0468760
12	5.9307349	1.0265529 1	1.1855577 1	1.0469106
13	6.2489404	1.0817022 1	1.2492287 1	1.0469390
14	6.5592444	1.1354790 1	1.3113160 1	1.0469629
15	6.8623777	1.1880106 1	1.3719663 1	1.0469833
16	7.1589603	1.2394045 1	1.4313038 1	1.0470006
17	7.4495247	1.2897538 1	1.4894359 1	1.0470157
18	7.7345313	1.3391383 1	1.5464544 1	1.0470289
19	8.0143821	1.3876282 1	1.6024404 1	1.0470405
20	8.2894315	1.4352848 1	1.6574647 1	1.0470507
21	8.5599925	1.4821628 1	1.7115903 1	1.0470599
22	8.8263448	1.5283106 1	1.7648731 1	1.0470681
23	9.0887382	1.5737716 1	1.8173631 1	1.0470754
24	9.3473982	1.6185852 1	1.8691058 1	1.0470821
25	9.6025288	1.6627865 1	1.9201418 1	1.0470881
26	9.8543146	1.7064078 1	1.9705083 1	1.0470937
27	1.0102926 1	1.7494786 1	2.0202392 1	1.0470987
28	1.0348514 1	1.7920253 1	2.0693652 1	1.0471034
29	1.0591224 1	1.8340729 1	2.1179150 1	1.0471077
30	1.0831184 1	1.8756436 1	2.1659142 1	1.0471116
31	1.1068516 1	1.9167587 1	2.2133876 1	1.0471152
32	1.1303331 1	1.9574374 1	2.2603571 1	1.0471186
33	1.1535732 1	1.9976976 1	2.3068435 1	1.0471218
34	1.1765815 1	2.0375560 1	2.3528660 1	1.0471247
35	1.1993672 1	2.0770284 1	2.3984430 1	1.0471274
36	1.2219383 1	2.1161290 1	2.4435906 1	1.0471300
37	1.2443031 1	2.1548718 1	2.4883253 1	1.0471324
38	1.2664685 1	2.1932693 1	2.5326612 1	1.0471347
39	1.2884418 1	2.2313335 1	2.5766124 1	1.0471368
40	1.3102293 1	2.2690758 1	2.6201920 1	1.0471388
41	1.3318372 1	2.3065067 1	2.6634120 1	1.0471407
42	1.3532712 1	2.3436362 1	2.7062841 1	1.0471425
43	1.3745368 1	2.3804739 1	2.7488193 1	1.0471442
44	1.3956392 1	2.4170288 1	2.7910280 1	1.0471458
45	1.4165833 1	2.4533093 1	2.8329198 1	1.0471473
46	1.4373737 1	2.4893235 1	2.8745043 1	1.0471488
47	1.4580148 1	2.5250789 1	2.9157899 1	1.0471501
48	1.4785109 1	2.5605830 1	2.9567854 1	1.0471514
49	1.4988658 1	2.5958425 1	2.9974985 1	1.0471527
50	1.5190834 1	2.6308641 1	3.0379369 1	1.0471539

Table 28.

σ = 0.005 mhos/meter ϵ_2 = 15

f = 7 kilocycles

s	Re τ_s	Im τ_s	$\lvert\tau_s\rvert$	Arg τ_s
0	4.6100920 - 1	6.8723625 - 1	8.2754040 - 1	9.7992647 - 1
1	1.3068566	2.2280080	2.5830010	1.0403191
2	1.9248567	3.3099821	3.8289757	1.0440678
3	2.4552935	4.2339438	4.8943586	1.0452822
4	2.9334947	5.0652853	5.8534185	1.0458585
5	3.3754706	5.8328708	6.7391530	1.0461874
6	3.7902098	6.5527146	7.5699245	1.0463969
7	4.1833974	7.2348778	8.3572885	1.0465407
8	4.5589183	7.8862053	9.1091145	1.0466447
9	4.9195754	8.5116214	9.8310690	1.0467229
10	5.2674749	9.1148185	1.0527403 1	1.0467836
11	5.6042510	9.6986562	1.1201409 1	1.0468320
12	5.9312018	1.0265404 1	1.1855703 1	1.0468712
13	6.2493834	1.0816905 1	1.2492407 1	1.0469036
14	6.5596664	1.1354679 1	1.3113274 1	1.0469308
15	6.8627812	1.1879998 1	1.3719771 1	1.0469538
16	7.1593469	1.2393942 1	1.4313143 1	1.0469736
17	7.4498963	1.2897439 1	1.4894459 1	1.0469908
18	7.7348892	1.3391288 1	1.5464641 1	1.0470058
19	8.0147275	1.3876190 1	1.6024497 1	1.0470189
20	8.2897654	1.4352759 1	1.6574737 1	1.0470306
21	8.5603158	1.4821541 1	1.7115990 1	1.0470410
22	8.8266583	1.5283022 1	1.7648815 1	1.0470503
23	9.0890427	1.5737635 1	1.8173714 1	1.0470587
24	9.3476943	1.6185773 1	1.8691138 1	1.0470663
25	9.6028170	1.6627788 1	1.9201496 1	1.0470731
26	9.8545955	1.7064004 1	1.9705159 1	1.0470794
27	1.0103199 1	1.7494713 1	2.0202466 1	1.0470852
28	1.0348782 1	1.7920181 1	2.0693723 1	1.0470904
29	1.0591486 1	1.8340659 1	2.1179220 1	1.0470953
30	1.0831440 1	1.8756368 1	2.1659211 1	1.0470998
31	1.1068766 1	1.9167520 1	2.2133943 1	1.0471039
32	1.1303576 1	1.9574308 1	2.2603636 1	1.0471078
33	1.1535972 1	1.9976912 1	2.3068500 1	1.0471114
34	1.1766050 1	2.0375498 1	2.3528724 1	1.0471147
35	1.1993902 1	2.0770223 1	2.3984492 1	1.0471178
36	1.2219610 1	2.1161230 1	2.4435968 1	1.0471207
37	1.2443253 1	2.1548659 1	2.4883313 1	1.0471235
38	1.2664904 1	2.1932635 1	2.5326671 1	1.0471261
39	1.2884633 1	2.2313278 1	2.5766183 1	1.0471285
40	1.3102504 1	2.2690702 1	2.6201977 1	1.0471308
41	1.3318580 1	2.3065012 1	2.6634177 1	1.0471329
42	1.3532917 1	2.3436308 1	2.7062897 1	1.0471349
43	1.3745569 1	2.3804686 1	2.7488248 1	1.0471369
44	1.3956590 1	2.4170236 1	2.7910334 1	1.0471387
45	1.4166028 1	2.4533041 1	2.8329251 1	1.0471404
46	1.4373929 1	2.4893183 1	2.8745094 1	1.0471421
47	1.4580338 1	2.5250738 1	2.9157950 1	1.0471436
48	1.4785296 1	2.5605780 1	2.9567904 1	1.0471451
49	1.4988843 1	2.5958376 1	2.9975035 1	1.0471465
50	1.5191016 1	2.6308592 1	3.0379417 1	1.0471479

Table 29.

σ = 0.005 mhos/meter ϵ_2 = 15

f = 8 kilocycles

s	Re τ_s	Im τ_s	$\lvert\tau_s\rvert$	Arg τ_s
0	4.6767152 - 1	6.8598358 - 1	8.3023500 - 1	9.7242177 - 1
1	1.3089561	2.2274673	2.5835977	1.0395123
2	1.9262707	3.3096116	3.8293666	1.0437000
3	2.4563989	4.2336523	4.8946612	1.0450570
4	2.9344188	5.0650411	5.8536700	1.0457010
5	3.3762730	5.8326583	6.7393710	1.0460685
6	3.7909241	6.5525253	7.5701185	1.0463027
7	4.1840444	7.2347062	8.3574640	1.0464634
8	4.5595119	7.8860478	9.1092755	1.0465796
9	4.9201252	8.5114754	9.8312180	1.0466671
10	5.2679884	9.1146820	1.0527542 1	1.0467349
11	5.6047336	9.6985280	1.1201539 1	1.0467889
12	5.9316577	1.0265283 1	1.1855826 1	1.0468328
13	6.2498161	1.0816790 1	1.2492524 1	1.0468690
14	6.5600786	1.1354569 1	1.3113385 1	1.0468994
15	6.8631751	1.1879894 1	1.3719878 1	1.0469252
16	7.1597246	1.2393842 1	1.4313245 1	1.0469473
17	7.4502591	1.2897342 1	1.4894556 1	1.0469664
18	7.7352386	1.3391195 1	1.5464735 1	1.0469832
19	8.0150647	1.3876100 1	1.6024588 1	1.0469979
20	8.2900915	1.4352672 1	1.6574825 1	1.0470109
21	8.5606315	1.4821457 1	1.7116075 1	1.0470225
22	8.8269645	1.5282940 1	1.7648897 1	1.0470330
23	9.0893401	1.5737556 1	1.8173794 1	1.0470423
24	9.3479834	1.6185696 1	1.8691216 1	1.0470508
25	9.6030985	1.6627713 1	1.9201572 1	1.0470585
26	9.8548696	1.7063931 1	1.9705233 1	1.0470656
27	1.0103467 1	1.7494642 1	2.0202538 1	1.0470720
28	1.0349043 1	1.7920112 1	2.0693794 1	1.0470778
29	1.0591741 1	1.8340591 1	2.1179289 1	1.0470833
30	1.0831689 1	1.8756301 1	2.1659278 1	1.0470883
31	1.1069010 1	1.9167455 1	2.2134008 1	1.0470929
32	1.1303815 1	1.9574245 1	2.2603701 1	1.0470972
33	1.1536206 1	1.9976850 1	2.3068563 1	1.0471012
34	1.1766280 1	2.0375437 1	2.3528786 1	1.0471050
35	1.1994127 1	2.0770163 1	2.3984553 1	1.0471085
36	1.2219831 1	2.1161171 1	2.4436028 1	1.0471117
37	1.2443470 1	2.1548601 1	2.4883371 1	1.0471148
38	1.2665117 1	2.1932578 1	2.5326729 1	1.0471177
39	1.2884843 1	2.2313222 1	2.5766239 1	1.0471203
40	1.3102710 1	2.2690647 1	2.6202032 1	1.0471229
41	1.3318783 1	2.3064957 1	2.6634230 1	1.0471253
42	1.3533116 1	2.3436255 1	2.7062951 1	1.0471276
43	1.3745766 1	2.3804633 1	2.7488300 1	1.0471297
44	1.3956784 1	2.4170184 1	2.7910386 1	1.0471317
45	1.4166219 1	2.4532990 1	2.8329302 1	1.0471337
46	1.4374117 1	2.4893133 1	2.8745144 1	1.0471355
47	1.4580523 1	2.5250689 1	2.9158000 1	1.0471373
48	1.4785479 1	2.5605732 1	2.9567954 1	1.0471389
49	1.4989023 1	2.5958328 1	2.9975083 1	1.0471405
50	1.5191194 1	2.6308545 1	3.0379466 1	1.0471421

Table 30.

σ = 0.005 mhos/meter ϵ_2 = 15

f = 9 kilocycles

s	Re τ_s	Im τ_s	$\lvert\tau_s\rvert$	Arg τ_s
0	4.7419218 - 1	6.8481425 - 1	8.3296385 - 1	9.6516282 - 1
1	1.3110128	2.2269404	2.5841862	1.0387228
2	1.9276559	3.3092496	3.8297507	1.0433399
3	2.4574819	4.2333674	4.8949583	1.0448364
4	2.9353240	5.0648022	5.8539175	1.0455467
5	3.3770590	5.8324505	6.7395850	1.0459522
6	3.7916238	6.5523400	7.5703085	1.0462105
7	4.1846780	7.2345382	8.3576355	1.0463878
8	4.5600932	7.8858936	9.1094330	1.0465159
9	4.9206638	8.5113325	9.8313640	1.0466124
10	5.2684914	9.1145486	1.0527678 1	1.0466872
11	5.6052052	9.6984025	1.1201668 1	1.0467468
12	5.9321042	1.0265164 1	1.1855946 1	1.0467952
13	6.2502398	1.0816677 1	1.2492638 1	1.0468351
14	6.5604823	1.1354461 1	1.3113494 1	1.0468686
15	6.8635610	1.1879791 1	1.3719982 1	1.0468971
16	7.1600944	1.2393744 1	1.4313345 1	1.0469215
17	7.4506146	1.2897248 1	1.4894653 1	1.0469426
18	7.7355809	1.3391104 1	1.5464827 1	1.0469611
19	8.0153950	1.3876012 1	1.6024677 1	1.0469773
20	8.2904108	1.4352587 1	1.6574911 1	1.0469917
21	8.5609407	1.4821375 1	1.7116158 1	1.0470045
22	8.8272644	1.5282861 1	1.7648979 1	1.0470160
23	9.0896313	1.5737478 1	1.8173872 1	1.0470263
24	9.3482665	1.6185620 1	1.8691292 1	1.0470357
25	9.6033742	1.6627640 1	1.9201646 1	1.0470442
26	9.8551382	1.7063859 1	1.9705305 1	1.0470519
27	1.0103729 1	1.7494572 1	2.0202609 1	1.0470590
28	1.0349298 1	1.7920044 1	2.0693863 1	1.0470655
29	1.0591991 1	1.8340524 1	2.1179356 1	1.0470715
30	1.0831933 1	1.8756236 1	2.1659344 1	1.0470770
31	1.1069249 1	1.9167391 1	2.2134072 1	1.0470821
32	1.1304049 1	1.9574182 1	2.2603764 1	1.0470869
33	1.1536436 1	1.9976789 1	2.3068625 1	1.0470913
34	1.1766505 1	2.0375377 1	2.3528847 1	1.0470954
35	1.1994348 1	2.0770104 1	2.3984612 1	1.0470993
36	1.2220047 1	2.1161114 1	2.4436086 1	1.0471029
37	1.2443683 1	2.1548545 1	2.4883429 1	1.0471062
38	1.2665326 1	2.1932522 1	2.5326784 1	1.0471094
39	1.2885048 1	2.2313167 1	2.5766294 1	1.0471124
40	1.3102912 1	2.2690593 1	2.6202086 1	1.0471152
41	1.3318981 1	2.3064905 1	2.6634284 1	1.0471179
42	1.3533312 1	2.3436203 1	2.7063003 1	1.0471203
43	1.3745958 1	2.3804582 1	2.7488352 1	1.0471227
44	1.3956973 1	2.4170134 1	2.7910437 1	1.0471250
45	1.4166405 1	2.4532941 1	2.8329353 1	1.0471271
46	1.4374301 1	2.4893084 1	2.8745194 1	1.0471291
47	1.4580705 1	2.5250641 1	2.9158049 1	1.0471310
48	1.4785658 1	2.5605684 1	2.9568002 1	1.0471329
49	1.4989200 1	2.5958281 1	2.9975131 1	1.0471346
50	1.5191368 1	2.6308499 1	3.0379513 1	1.0471363

Table 31.

σ = 0.005 mhos/meter ϵ_2 = 15

s	Re τ_s	Im τ_s	$\lvert\tau_s\rvert$	Arg τ_s
		f = 10 kilocycles		
0	4.8058876 - 1	6.8372164 - 1	8.3572775 - 1	9.5812590 - 1
1	1.3130330	2.2264255	2.5847681	1.0379482
2	1.9290160	3.3088951	3.8301293	1.0429864
3	2.4585452	4.2330884	4.8952510	1.0446199
4	2.9362127	5.0645680	5.8541605	1.0453953
5	3.3778308	5.8322467	6.7397955	1.0458379
6	3.7923106	6.5521584	7.5704955	1.0461200
7	4.1853002	7.2343737	8.3578050	1.0463135
8	4.5606639	7.8857425	9.1095880	1.0464534
9	4.9211926	8.5111925	9.8315075	1.0465586
10	5.2689851	9.1144178	1.0527812 1	1.0466404
		f = 20 Kilocycles		
0	5.3981006 - 1	6.7616103 1	8.6521015 - 1	8.9706503 - 1
1	1.3318858	2.2217560	2.5903899	1.0307634
2	1.9416987	3.3056450	3.8337297	1.0397014
3	2.4684553	4.2305197	4.8980169	1.0426069
4	2.9444935	5.0624098	5.8564525	1.0439872
5	3.3850200	5.8303667	6.7417755	1.0447754
6	3.7987088	6.5504817	7.5722520	1.0452777
7	4.1910942	7.2328529	8.3593920	1.0456224
8	4.5659788	7.8843460	9.1110415	1.0458716
9	4.9261164	8.5098975	9.8328520	1.0460592
10	5.2735827	9.1132078	1.0529066 1	1.0462048
		f = 30 kilocycles		
0	5.9343711 - 1	6.7330429 - 1	8.9750000 - 1	8.4836411 - 1
1	1.3492993	2.2176880	2.5959100	1.0242042
2	1.9533872	3.3027495	3.8371703	1.0366927
3	2.4775783	4.2282150	4.9006322	1.0407620
4	2.9521114	5.0604666	5.8586075	1.0426965
5	3.3916307	5.8286706	6.7436310	1.0438014
6	3.8045901	6.5489669	7.5738940	1.0445057
7	4.1964187	7.2314780	8.3608735	1.0449890
8	4.5708618	7.8830824	9.1123965	1.0453384
9	4.9306396	8.5087253	9.8341045	1.0456015
10	5.2778054	9.1121121	1.0530234 1	1.0458056
		f = 50 kilocycles		
0	6.90199 - 1	6.77996 - 1	9.67499 - 1	7.76480 - 1
1	1.382061	2.210790	2.607237	1.012094
2	1.975281	3.297640	3.843977	1.031114
3	2.4946269	4.2240966	4.9057268	1.0373392
4	2.9663272	5.0569731	5.8627700	1.0403018
5	3.4039549	5.8256109	6.7471960	1.0419945
6	3.8155468	6.5462281	7.5770375	1.0430737
7	4.2063328	7.2289875	8.3637010	1.0438142
8	4.5799501	7.8807911	9.1149775	1.0443498
9	4.9390547	8.5065976	9.8364865	1.0447528
10	5.2856595	9.1101216	1.0532451 1	1.0450656

Table 32.

σ = 0.005 mhos/meter ϵ_2 = 15

s	Re τ_s	Im τ_s	$\lvert\tau_s\rvert$	Arg τ_s
		f = 60 kilocycles		
0	7.34480 - 1	6.84587 - 1	1.00405	7.50254 - 1
1	1.39789	2.20786	2.61319	1.00636
2	1.985799	3.295354	3.847435	1.028463
3	2.5027940	4.2222255	4.9082753	1.0357126
4	2.9731248	5.0553742	5.8648340	1.0391641
5	3.4098410	5.8242044	6.7489535	1.0411364
6	3.8207752	6.5449655	7.5785815	1.0423938
7	4.2110605	7.2278372	8.3650860	1.0432566
8	4.5842815	7.8797312	9.1162385	1.0438806
9	4.9430635	8.5056121	9.8376480	1.0443501
10	5.2893997	9.1091989	1.0533530 1	1.0447146
		f = 70 kilocycles		
0	7.76372 - 1	6.93589 1	1.04107	7.29141 - 1
1	1.41352	2.20526	2.61939	1.00079
2	1.996146	3.293227	3.850966	1.025877
3	2.510811	4.220462	4.910852	1.034125
4	2.9797882	5.0538581	5.8669090	1.0380541
5	3.4156053	5.8228661	6.7507135	1.0402993
6	3.8258917	6.5437616	7.5801230	1.0417308
7	4.2156843	7.2267384	8.3664655	1.0427129
8	4.5885161	7.8787176	9.1174925	1.0434232
9	4.9469813	8.5046691	9.8388020	1.0439577
10	5.2930539	9.1083153	1.0534602 1	1.0443725
		f = 80 kilocycles		
0	8.1600 - 1	7.0476 - 1	1.0782	7.1238 - 1
1	1.42905	2.20299	2.62590	9.95345 - 1
2	2.00638	3.29125	3.85459	1.02334
3	2.518719	4.218799	4.913472	1.032569
4	2.986351	5.052418	5.869006	1.036966
5	3.4212766	5.8215902	6.7524845	1.0394793
6	3.8309218	6.5426109	7.5816700	1.0410815
7	4.2202276	7.2256865	8.3678470	1.0421806
8	4.5926750	7.8777459	9.1187470	1.0429755
9	4.9508275	8.5037638	9.8399540	1.0435735
10	5.2966400	9.1074664	1.0535670 1	1.0440377
		f = 90 kilocycles		
0	8.5343 - 1	7.1791 1	1.1152	6.9937 - 1
1	1.4445	2.2010	2.6327	9.9001 - 1
2	2.01654	3.28943	3.85834	1.02085
3	2.526550	4.217232	4.916147	1.031038
4	2.992840	5.051051	5.871134	1.035896
5	3.426877	5.820373	6.754275	1.038673
6	3.8358851	6.5415096	7.5832290	1.0404433
7	4.2247073	7.2246777	8.3692365	1.0416576
8	4.5967734	7.8768125	9.1200055	1.0425357
9	4.9546164	8.5028934	9.8411085	1.0431963
10	5.3001715	9.1066493	1.0536740 1	1.0437090

Table 33.

σ = 0.005 mhos/meter ϵ_2 = 15

s	Re τ_s	Im τ_s	$\lvert\tau_s\rvert$	Arg τ_s
		f = 100 kilocycles		
0	8.8869 - 1	7.3284 1	1.1519	6.8958 - 1
1	1.4601	2.1995	2.6400	9.8476 - 1
2	2.02666	3.28775	3.86221	1.01839
3	2.53433	4.21576	4.91889	1.02953
4	2.999274	5.049755	5.873302	1.034841
5	3.432424	5.819213	6.756092	1.037878
6	3.840796	6.540456	7.584806	1.039815
7	4.2291370	7.2237103	8.3706385	1.0411425
8	4.6008241	7.8759157	9.1212735	1.0421026
9	4.9583591	8.5020560	9.8422700	1.0428249
10	5.3036587	9.1058623	1.0537814 1	1.0433854
		f = 200 kilocycles		
0	1.12	9.48 1	1.47	7.03 - 1
1	1.625	2.208	2.741	9.363 - 1
2	2.131	3.281	3.912	9.948 - 1
3	2.6128	4.2067	4.9521	1.0150
4	3.0634	5.0408	5.8986	1.0247
5	3.48724	5.81070	6.77680	1.03027
6	3.88902	6.53244	7.60246	1.03381
7	4.27243	7.21617	8.38611	1.03623
8	4.64026	7.86881	9.13510	1.03798
9	4.99468	8.49533	9.85482	1.03930
10	5.337410	9.099479	1.054934 1	1.040316
		f = 300 kilocycles		
0	1.161	1.155	1.638	7.829 - 1
1	1.83	2.29	2.93	8.96 - 1
2	2.25	3.30	3.99	7.2 - 1
3	2.700	4.212	5.003	1.001
4	3.133	5.041	5.935	1.015
5	3.5452	5.8091	6.8054	1.0229
6	3.9393	6.5298	7.6261	1.0280
7	4.3170	7.2131	8.4062	1.0315
8	4.6805	7.8654	9.1527	1.0340
9	5.03148	8.49185	9.87052	1.03590
10	5.37139	9.09595	1.05635 1	1.03737
		f = 400 kilocycles		
0	1.15669	1.27758	1.72341	8.35020 - 1
1	1.7906	2.4204	3.0108	9.3385 - 1
2	2.40	3.36	4.13	9.51 - 1
3	2.80	4.24	5.08	9.87 - 1
4	3.212	5.057	5.991	1.005
5	3.610	5.818	6.847	1.015
6	3.995	6.535	7.659	1.022
7	4.3657	7.2163	8.4341	1.0267
8	4.7240	7.8672	9.1766	1.0300
9	5.0708	8.4927	9.8914	1.0325
10	5.4075	9.0962	1.0582 1	1.0344

Table 34.

σ = 0.005 mhos/meter ϵ_2 = 15

s	Re τ_s	Im τ_s	$\lvert\tau_s\rvert$	Arg τ_s
		f = 500 kilocycles		
0	1.124950	1.348631	1.756223	8.75581 - 1
1	1.8045	2.5167	3.0968	9.4875 - 1
2	2.343	3.471	4.188	9.772 - 1
3	2.795	4.317	5.143	9.963 - 1
4	3.31	5.10	6.07	9.95 - 1
5	3.686	5.843	6.909	1.008
6	4.058	6.552	7.707	1.016
7	4.420 7	2.29	8.473	1.022
8	4.772	7.877	9.209	1.026
9	5.114	8.500	9.920	1.029
10	5.4469	9.1016	1.0607 1	1.0315
		f = 600 kilocycles		
0	1.098047	1.392024	1.772975	9.029140 - 1
1	1.7872	2.5740	3.1336	9.6388 - 1
2	2.3457	3.5399	4.2466	9.8558 - 1
3	2.833	4.393	5.227	9.981 - 1
4	3.271	5.174	6.121	1.007
5	3.67	5.90	6.95	1.1
6	4.13	6.59	7.78	1.01
7	4.483	7.254	8.528	1.017
8	4.827	7.896	9.255	1.022
9	5.163	8.515	9.958	1.026
10	5.491	9.114	1.064 1	1.029
		f = 700 kilocycles		
0	1.0770080	1.4212058	1.7831916	9.2231368 - 1
1	1.76899	2.61048	3.15340	9.75229 - 1
2	2.3333	3.5831	4.2758	9.9359 - 1
3	2.8295	4.4422	5.2668	1.0036
4	3.281	5.227	6.172	1.010
5	3.698	5.959	7.013	1.015
6	4.089	6.650	7.807	1.020
7	4.457	7.309	8.561	1.023
8	4.81	7.94	9.28	1.03
9	5.217	8.543	1.001 1	1.023
10	5.539	9.137	1.068 1	1.026
		f = 800 kilocycles		
0	1.0604338	1.4422645	1.7901527	9.3679826 - 1
1	1.75347	2.63573	3.16571	9.83760 - 1
2	2.3198	3.6122	4.2930	9.9993 - 1
3	2.8192	4.4749	5.2889	1.0086
4	3.2746	5.2633	6.1988	1.0142
5	3.698	5.998	7.046	1.018
6	4.096	6.691	7.845	1.022
7	4.473	7.351	8.605	1.024
8	4.833	7.983	9.332	1.026
9	5.178	8.592	1.003 1	1.028
10	5.51	9.18	1.07 1	1.03

Table 35.

σ = 0.005 mhos/meter ϵ_2 = 15

s	Re τ_s	Im τ_s	$\lvert\tau_s\rvert$	Arg τ_s
		f = 90 kilocycles		
0	1.0471132	1.4582463	1.7952517	9.4804989 - 1
1	1.740615	2.654273	3.174100	9.903697 - 1
2	2.30779	3.63310	4.30411	1.00489
3	2.8085	4.4980	5.3028	1.0126
4	3.2656	5.2884	6.2154	1.0176
5	3.6910	6.0249	7.0656	1.0211
6	4.0918	6.7196	7.8674	1.0238
7	4.473	7.381	8.630	1.026
8	4.837	8.014	9.361	1.028
9	5.186	8.624	1.006 1	1.029
10	5.524	9.214	1.074 1	1.031
		f = 1000 kilocycles		
0	1.0361903	1.4708329	1.7991775	9.5706180 - 1
1	1.729924	2.668528	3.180201	9.956391 - 1
2	2.29752	3.64886	4.31194	1.00886
3	2.79884	4.51513	5.31224	1.01589
4	3.2568	5.3069	6.2265	1.0204
5	3.6832	6.0446	7.0784	1.0235
6	4.0852	6.7406	7.8819	1.0259
7	4.4674	7.4029	8.6464	1.0278
8	4.8332	8.0373	9.3786	1.0294
9	5.185	8.648	1.008 1	1.031
10	5.525	9.238	1.076 1	1.032
		f = 1100 kilocycles		
0	1.0270720	1.4810289	1.8023106	9.6445592 - 1
1	1.720935	2.679863	3.184852	9.999432 - 1
2	2.288771	3.661208	4.317745	1.012096
3	2.79042	4.52842	5.31912	1.01855
4	3.24880	5.32110	6.23448	1.02265
5	3.6757	6.0597	7.0874	1.0255
6	4.0784	6.7564	7.8919	1.0277
7	4.4613	7.4195	8.6575	1.0294
8	4.82800	8.0546	9.3907	1.0308
9	5.1807	8.6659	1.0096 1	1.0320
10	5.5213	9.2567	1.0778 1	1.0330
		f = 1200 kilocycles		
0	1.0193427	1.4894728	1.8048792	9.7064107 - 1
1	1.7132862	2.6891140	3.1885238	1.0035295
2	2.281263	3.671170	4.322228	1.014790
3	2.78311	4.53905	5.32434	1.02077
4	3.24173	5.33235	6.24041	1.02456
5	3.66897	6.07153	7.09400	1.02723
6	4.07193	6.76888	7.89926	1.02923
7	4.4553	7.4325	8.6656	1.0308
8	4.8224	8.0681	9.3995	1.0321
9	5.1756	8.6799	1.0106 1	1.0331
10	5.5168	9.2712	1.0788 1	1.0340

Table 36.

σ = 0.005 mhos/meter ϵ_2 = 15

s	Re τ_s	Im τ_s	$\lvert\tau_s\rvert$	Arg τ_s
		f = 1300 kilocycles		
0	1.0127037	1.4965919	1.8070297	9.7589805 - 1
1	1.7067018	2.6968241	3.1915030	1.0065676
2	2.274770	3.679396	4.325799	1.017069
3	2.776737	4.547749	5.328442	1.022638
4	3.23551	5.34150	6.24501	1.02617
5	3.66293	6.08111	7.09909	1.02865
6	4.06610	6.77888	7.90483	1.03051
7	4.4971	7.44290	8.67161	1.03196
8	4.8171	8.0789	9.4060	1.0331
9	5.1706	8.6911	1.0113 1	1.0341
10	5.5121	9.2827	1.0796 1	1.0349
		f = 1400 kilocycles		
0	1.0069366	1.5026815	1.8088596	9.8042529 - 1
1	1.7009747	2.7033584	3.1939728	1.0091768
2	2.269106	3.666315	4.328714	1.019022
3	2.771155	4.555023	5.331748	1.024243
4	3.230031	5.349110	6.248687	1.027555
5	3.65757	6.08904	7.10311	1.02988
6	4.06087	6.78711	7.90921	1.03161
7	4.44463	7.45143	8.67632	1.03297
8	4.81215	8.08772	9.41106	1.03407
9	5.16586	8.70017	1.01183 1	1.03497
10	5.5076	9.2920	1.0802 1	1.0357
		f = 1500 kilocycles		
0	1.001877	1.507956	1.810439	9.843684 - 1
1	1.695947	2.708975	3.196057	1.011444
2	2.264124	3.692225	4.331141	1.020717
3	2.766231	4.561202	5.334473	1.025633
4	3.225177	5.355543	6.251688	1.028751
5	3.652792	6.095715	7.106380	1.030936
6	4.05619	6.79402	7.91273	1.03257
7	4.44005	7.45856	8.68010	1.03384
8	4.80768	8.09506	9.41509	1.03487
9	5.16151	8.70773	1.01225 1	1.03572
10	5.50340	9.29976	1.08062 1	1.03644
		f = 1600 kilocycles		
0	9.9740192 - 1	1.5125706	1.8118169	9.8783547 - 1
1	1.6914964	2.7138576	3.1978404	1.0134340
2	2.2597090	3.6973366	4.3331955	1.0222025
3	2.761859	4.566523	5.336759	1.026851
4	3.220855	5.361060	6.254189	1.029798
5	3.648528	6.101419	7.109084	1.031863
6	4.051986	6.799900	7.915632	1.033405
7	4.43592	7.46462	8.68320	1.03461
8	4.80363	8.10129	9.41837	1.03558
9	5.15754	8.71411	1.01260 1	1.03638
10	5.49952	9.30630	1.08098 1	1.03706

Table 37.

σ = 0.005 mhos/meter ϵ_2 = 15

s	Re τ_s	Im τ_s	$\lvert\tau_s\rvert$	Arg τ_s
		f = 1700 kilocycles		
0	9.9341264 - 1	1.5166453	1.8130311	9.9090960 - 1
1	1.6875286	2.7181462	3.1993862	1.0151955
2	2.2557687	3.7018068	4.3349586	1.0235159
3	2.7579518	4.5711585	5.3387065	1.0279263
4	3.216986	5.365850	6.256305	1.030723
5	3.644702	6.106356	7.111360	1.03268
6	4.048207	6.804977	7.918062	1.034143
7	4.432191	7.469832	8.685777	1.035284
8	4.79995	8.10663	9.42110	1.03620
9	5.15393	8.71958	1.01289 1	1.03697
10	5.49597	9.31190	1.08128 1	1.03761
		f = 1800 kilocycles		
0	9.8983338 - 1	1.5202713	1.8141100	9.9365528 - 1
1	1.6839679	2.7219450	3.2007395	1.0167666
2	2.2522309	3.7057521	4.3364897	1.0246860
3	2.754440	4.575236	5.340387	1.028884
4	3.213505	5.370052	6.258120	1.031545
5	3.641253	6.110674	7.113302	1.033409
6	4.044794	6.809408	7.920126	1.034800
7	4.428817	7.474371	8.687960	1.035885
8	4.796621	8.111274	9.423393	1.036760
9	5.150638	8.724325	1.013128 1	1.037483
10	5.49273	9.31674	1.08153 1	1.03809
		f = 1900 kilocycles		
0	9.8660317 - 1	1.5235197	1.8150753	9.9612319 - 1
1	1.6807537	2.7253351	3.2019344	1.0181774
2	2.249036	3.709262	4.337832	1.025736
3	2.751267	4.578854	5.341851	1.029742
4	3.210355	5.373769	6.259695	1.032282
5	3.638130	6.114488	7.114981	1.034060
6	4.041699	6.813312	7.921903	1.035387
7	4.425752	7.478363	8.689832	1.036423
8	4.793588	8.115350	9.425359	1.037257
9	5.14764	8.72848	1.013334 1	1.037946
10	5.48976	9.32098	1.08175 1	1.03853
		f = 2000 kilocycles		
0	9.8367272 - 1	1.5264480	1.8159448	9.9835424 - 1
1	1.6778378	2.7283806	3.2029986	1.0194513
2	2.2461364	3.7124054	4.3390187	1.0266827
3	2.7483854	4.5820866	5.3431395	1.0305160
4	3.2074930	5.3770851	6.2610745	1.0329459
5	3.6352887	6.1178811	7.1164455	1.0346472
6	4.0388802	6.8167804	7.9234495	1.0359166
7	4.4229573	7.4819022	8.6914565	1.0369066
8	4.7908186	8.1189584	9.4270585	1.0377044
9	5.1448965	8.7321589	1.0135115 1	1.0383637
10	5.487048	9.324719	1.081934 1	1.038919

Table 38.

σ = 0.005 mhos/meter ϵ_2 = 15

s	Re τ_s	Im τ_s	$\lvert\tau_s\rvert$	Arg τ_s
		f = 2500 kilocycles		
0	9.7232175 - 1	1.5376294	1.8192619	1.0069283
1	1.6665421	2.7399263	3.2069548	1.0243376
2	2.2348972	3.7242554	4.3433678	1.0303090
3	2.7372056	4.5942092	5.3478085	1.0334747
4	3.1963756	5.3894603	6.2660275	1.0354814
5	3.6242366	6.1304942	7.1216605	1.0368861
6	4.0278960	6.8296196	7.9289125	1.0379338
7	4.4120436	7.4949586	8.6971565	1.0387508
8	4.7799786	8.1322235	9.4329875	1.0394088
9	5.1341329	8.7456265	1.0141267 1	1.0399522
10	5.4763633	9.3383830	1.0825708 1	1.0404102
		f = 3000 kilocycles		
0	9.6455315 - 1	1.5451521	1.8214988	1.0127403
1	1.6588109	2.7476268	3.2095338	1.0276424
2	2.2272010	3.7321029	4.3461496	1.0327564
3	2.7295437	4.6021880	5.3507515	1.0354681
4	3.1887478	5.3975598	6.2691120	1.0371870
5	3.6166429	6.1387067	7.1248740	1.0383901
6	4.0203367	6.8379394	7.9322455	1.0392875
7	4.4045196	7.5033808	8.7006045	1.0399871
8	4.7724903	8.1407444	9.4365450	1.0405504
9	5.1266807	8.7542422	1.0144931 1	1.0410157
10	5.4689476	9.3470906	1.0829473 1	1.0414076
		f = 3500 kilocycles		
0	9.5890521 - 1	1.5505738	1.8231233	1.0169430
1	1.6531898	2.7531473	3.2113638	1.0300294
2	2.2216039	3.7377048	4.3480986	1.0345221
3	2.7239693	4.6078618	5.3527935	1.0369045
4	3.1831954	5.4032997	6.2712345	1.0384148
5	3.6111123	6.1445084	7.1270690	1.0394719
6	4.0148277	6.8437995	7.9345090	1.0402604
7	4.3990317	7.5092966	8.7029315	1.0408750
8	4.7670236	8.1467136	9.4389330	1.0413699
9	5.1212349	8.7602629	1.0147377 1	1.0417786
10	5.4635232	9.3531611	1.0831977 1	1.0421228
		f = 4000 kilocycles		
0	9.5462146 - 1	1.5546766	1.8243688	1.0201229
1	1.6489265	2.7573098	3.2127428	1.0318340
2	2.2173581	3.7419163	4.3495535	1.0358559
3	2.7197398	4.6121168	5.3543075	1.0379889
4	3.1789814	5.4075945	6.2727985	1.0393411
5	3.6069131	6.1488402	7.1286785	1.0402876
6	4.0106431	6.8481663	7.9361605	1.0409936
7	4.3948617	7.5136965	8.7046220	1.0415438
8	4.7628677	8.1511454	9.4406610	1.0419870
9	5.1170933	8.7647254	1.0149141 1	1.0423528
10	5.4593954	9.3576532	1.0833775 1	1.0426610

Table 39.

σ = 0.005 mhos/meter ϵ_2 = 15

s	Re τ_s	Im τ_s	$\lceil \tau_s \rceil$	Arg τ_s
		f = 4500 kilocycles		
0	9.5126877 - 1	1.5578971	1.8253646	1.0226113
1	1.6455894	2.7605692	3.2138306	1.0332457
2	2.2140343	3.7452072	4.3506925	1.0368987
3	2.7164283	4.6154359	5.3554860	1.0388363
4	3.1756814	5.4109389	6.2740110	1.0400647
5	3.6036242	6.1522085	7.1299210	1.0409246
6	4.0073650	6.8515569	7.9374305	1.0415658
7	4.3915938	7.5171085	8.7059185	1.0420657
8	4.7596101	8.1545778	9.4419820	1.0424682
9	5.1138455	8.7681773	1.0150485 1	1.0428006
10	5.4561576	9.3611240	1.0835142 1	1.0430805
		f = 5000 kilocycles		
0	9.4858023 - 1	1.5604993	1.8261880	1.0246104
1	1.6429132	2.7631974	3.2147199	1.0343794
2	2.2113687	3.7478571	4.3516187	1.0377359
3	2.7137720	4.6181047	5.3564400	1.0395165
4	3.1730342	5.4136251	6.2749885	1.0406452
5	3.6009856	6.1549106	7.1309200	1.0414354
6	4.0047343	6.8542742	7.9384490	1.0420247
7	4.3889711	7.5198402	8.7069550	1.0424840
8	4.7569950	8.1573232	9.4430355	1.0428540
9	5.1112381	8.7709360	1.0151555 1	1.0431594
10	5.4535577	9.3638954	1.0836228 1	1.0434166
		f = 6000 kilocycles		
0	9.4455548 - 1	1.5644653	1.8274947	1.0276196
1	1.6389067	2.7671955	3.2161135	1.0360855
2	2.2073776	3.7518813	4.3530598	1.0389954
3	2.7097947	4.6221519	5.3579170	1.0405392
4	3.1690697	5.4176932	6.2764960	1.0415179
5	3.5970330	6.1589984	7.1324545	1.0422031
6	4.0007934	6.8583802	7.9400080	1.0427141
7	4.3850414	7.5239637	8.7085370	1.0431125
8	4.7530761	8.1614634	9.4446395	1.0434332
9	5.1073298	8.7750921	1.0153180 1	1.0436981
10	5.4496595	9.3680669	1.0837872 1	1.0439211
		f = 7000 kilocycles		
0	9.4170725 - 1	1.5673700	1.8285134	1.0297741
1	1.6360710	2.7701181	3.2171856	1.0373068
2	2.2045523	3.7548184	4.3541603	1.0398967
3	2.7069789	4.6251017	5.3590390	1.0412708
4	3.1662626	5.4206548	6.2776365	1.0421421
5	3.5942343	6.1619708	7.1336110	1.0427520
6	3.9980024	6.8613628	7.9411790	1.0432070
7	4.3822578	7.5269558	8.7097215	1.0435616
8	4.7502999	8.1644647	9.4458370	1.0438471
9	5.1045605	8.7781022	1.0154389 1	1.0440829
10	5.4468970	9.3710854	1.0839093 1	1.0442814

Table 40.

σ = 0.005 mhos/meter ϵ_2 = 15

s	Re τ_s	Im τ_s	$\lvert\tau_s\rvert$	Arg τ_s
		f = 8000 kilocycles		
0	9.3960148 - 1	1.5696112	1.8293524	1.0313918
1	1.6339744	2.7723701	3.2180597	1.0382236
2	2.2024634	3.7570792	4.3550533	1.0405731
3	2.7048968	4.6273701	5.3599460	1.0418198
4	3.1641866	5.4229302	6.2785545	1.0426104
5	3.5921641	6.1642525	7.1345395	1.0431638
6	3.9959379	6.8636507	7.9421170	1.0435766
7	4.3801987	7.5292497	8.7106685	1.0438983
8	4.7482459	8.1667640	9.4467915	1.0441574
9	5.1025115	8.7804068	1.0155352 1	1.0443714
10	5.4448529	9.3733951	1.0840063 1	1.0445515
		f = 9000 kilocycles		
0	9.3799155 - 1	1.5714092	1.8300697	1.0326512
1	1.6323715	2.7741750	3.2188017	1.0389374
2	2.2008661	3.7588896	4.3558080	1.0410997
3	2.7033046	4.6291855	5.3607100	1.0422472
4	3.1625992	5.4247501	6.2793270	1.0429748
5	3.5905810	6.1660766	7.1353185	1.0434842
6	3.9943590	6.8654787	7.9429025	1.0438642
7	4.3786238	7.5310812	8.7114595	1.0441603
8	4.7466747	8.1685991	9.4475885	1.0443988
9	5.1009440	8.7822452	1.0156154 1	1.0445958
10	5.4432890	9.3752369	1.0840870 1	1.0447616
		f = 10000 kilocycles		
0	9.3672734 - 1	1.5728950	1.8306985	1.0336602
1	1.6311128	2.7756655	3.2194484	1.0395091
2	2.1996119	3.7603838	4.3564641	1.0415214
3	2.7020543	4.6306831	5.3613735	1.0425894
4	3.1613525	5.4262506	6.2799955	1.0432666
5	3.5893378	6.1675799	7.1359925	1.0437408
6	3.9931190	6.8669845	7.9435810	1.0440944
7	4.3773868	7.5325895	8.7121420	1.0443701
8	4.7454408	8.1701098	9.4482750	1.0445921
9	5.0997130	8.7837582	1.0156844 1	1.0447754
10	5.4420607	9.3767519	1.0841564 1	1.0449297

Table 41.

$[\delta^2 \tau_s]$

$\sigma = 5$
$\epsilon_2 = 80$

s	f = 0.1 kc		f = 0.2 kc		f = 0.5 kc	
0	1.0653797	8	3.3557810	7	7.2874493	6
1	3.3966763	8	1.0698874	8	2.3233049	7
2	5.0404268	8	1.5876358	8	3.4476105	7
3	6.4450311	8	2.0300583	8	4.4083448	7
4	7.7091572	8	2.4282329	8	5.2729940	7
5	8.8764919	8	2.7959203	8	6.0714391	7
6	9.9713101	8	3.1407662	8	6.8202833	7
7	1.1008875	9	3.4675785	8	7.5299674	7
8	1.1999576	9	3.7796296	8	8.2075970	7
9	1.2950890	9	4.0792750	8	8.8582867	7
10	1.3868427	9	4.3682811	8	9.4858728	7
11	1.4756531	9	4.6480163	8	1.0093327	8
12	1.5618651	9	4.9195667	8	1.0683008	8
13	1.6457586	9	5.1838145	8	1.1256832	8
14	1.7275646	9	5.4414876	8	1.1816377	8
15	1.8074769	9	5.6931957	8	1.2362970	8
16	1.8856592	9	5.9394545	8	1.2897728	8
17	1.9622526	9	6.1807085	8	1.3421620	8
18	2.0373788	9	6.4173412	8	1.3935476	8
19	2.1111441	9	6.6496875	8	1.4440023	8
20	2.1836421	9	6.8780424	8	1.4935904	8
21	2.2549560	9	7.1026665	8	1.5423683	8
22	2.3251592	9	7.3237923	8	1.5903866	8
23	2.3943177	9	7.5416288	8	1.6376904	8
24	2.4624915	9	7.7563625	8	1.6843206	8
25	2.5297340	9	7.9681630	8	1.7303138	8
26	2.5960943	9	8.1771848	8	1.7757037	8
27	2.6616172	9	8.3835688	8	1.8205206	8
28	2.7263428	9	8.5874418	8	1.8647923	8
29	2.7903093	9	8.7889236	8	1.9085447	8
30	2.8535503	9	8.9881205	8	1.9518010	8
31	2.9160984	9	9.1851341	8	1.9945832	8
32	2.9779828	9	9.3800574	8	2.0369114	8
33	3.0392305	9	9.5729754	8	2.0788044	8
34	3.0998668	9	9.7639684	8	2.1202790	8
35	3.1599161	9	9.9531117	8	2.1613521	8
36	3.2193999	9	1.0140473	9	2.2020385	8
37	3.2783393	9	1.0326121	9	2.2423524	8
38	3.3367534	9	1.0510114	9	2.2823070	8
39	3.3946605	9	1.0692510	9	2.3219149	8
40	3.4520779	9	1.0873364	9	2.3611880	8
41	3.5090216	9	1.1052725	9	2.4001370	8
42	3.5655070	9	1.1230643	9	2.4387723	8
43	3.6215484	9	1.1407162	9	2.4771041	8
44	3.6771597	9	1.1582326	9	2.5151416	8
45	3.7323532	9	1.1756176	9	2.5528936	8
46	3.7871419	9	1.1928749	9	2.5903686	8
47	3.8415370	9	1.2100083	9	2.6275742	8
48	3.8955497	9	1.2270212	9	2.6645184	8
49	3.9491903	9	1.2439170	9	2.7012081	8
50	4.0024690	9	1.2606986	9	2.7376502	8

Table 42.

$|\delta^2 \tau_s|$

$\sigma = 5$
$\epsilon_2 = 80$

s	f = 0.1 kc		f = 0.2 kc		f = 0.5 kc	
51	4.0553958	9	1.2773695	9	2.7738516	8
52	4.1079792	9	1.2939323	9	2.8098182	8
53	4.1602280	9	1.3103897	9	2.8455558	8
54	4.2121513	9	1.3267445	9	2.8810707	8
55	4.2637556	9	1.3429988	9	2.9163677	8
56	4.3150504	9	1.3591556	9	2.9514527	8
57	4.3660415	9	1.3752168	9	2.9863301	8
58	4.4167372	9	1.3911849	9	3.0210055	8
59	4.4671428	9	1.4070618	9	3.0554826	8
60	4.5172658	9	1.4228495	9	3.0897663	8
61	4.5671123	9	1.4385502	9	3.1238608	8
62	4.6166885	9	1.4541657	9	3.1577704	8
63	4.6659999	9	1.4696978	9	3.1914990	8
64	4.7150516	9	1.4851482	9	3.2250498	8
65	4.7638501	9	1.5005187	9	3.2584276	8
66	4.8123994	9	1.5158108	9	3.2916349	8
67	4.8607053	9	1.5310262	9	3.3246755	8
68	4.9087724	9	1.5461664	9	3.3575530	8
69	4.9566049	9	1.5612326	9	3.3902698	8
70	5.0042085	9	1.5762268	9	3.4228302	8
71	5.0515859	9	1.5911498	9	3.4552360	8
72	5.0987427	9	1.6060032	9	3.4874907	8
73	5.1456825	9	1.6207884	9	3.5195971	8
74	5.1924085	9	1.6355061	9	3.5515573	8
75	5.2389254	9	1.6501581	9	3.5833744	8
76	5.2852373	9	1.6647453	9	3.6150512	8
77	5.3313469	9	1.6792690	9	3.6465897	8
78	5.3772573	9	1.6937299	9	3.6779920	8
79	5.4229736	9	1.7081296	9	3.7092615	8
80	5.4684972	9	1.7224686	9	3.7403992	8
81	5.5138321	9	1.7367483	9	3.7714079	8
82	5.5589815	9	1.7509695	9	3.8022896	8
83	5.6039494	9	1.7651334	9	3.8330472	8
84	5.6487360	9	1.7792403	9	3.8636808	8
85	5.6933467	9	1.7932918	9	3.8941941	8
86	5.7377826	9	1.8072882	9	3.9245878	8
87	5.7820469	9	1.8212306	9	3.9548643	8
88	5.8261437	9	1.8351202	9	3.9850260	8
89	5.8700737	9	1.8489573	9	4.0150736	8
90	5.9138395	9	1.8627427	9	4.0450091	8
91	5.9574439	9	1.8764772	9	4.0748341	8
92	6.0008896	9	1.8901618	9	4.1045506	8
93	6.0441785	9	1.9037969	9	4.1341598	8
94	6.0873137	9	1.9173836	9	4.1636637	8
95	6.1302956	9	1.9309221	9	4.1930629	8
96	6.1731277	9	1.9444133	9	4.2223597	8
97	6.2158115	9	1.9578579	9	4.2515550	8
98	6.2583495	9	1.9712565	9	4.2806505	8
99	6.3007430	9	1.9846096	9	4.3096473	8
100	6.3429946	9	1.9979181	9	4.3385469	8

Table 43.

$[\delta^2 \tau_s]$

$\sigma = 5$
$\epsilon_2 = 80$

s	f = 1 kc		f = 2 kc		f = 3 kc		f = 4 kc	
0	2.3042027	3	7.2816696	2	3.7164772	2	2.3082194	2
1	7.3205934	3	2.3065111	3	1.1737790	3	7.2688543	2
2	1.0861068	4	3.4214697	3	1.7409226	3	1.0779482	3
3	1.3886803	4	4.3744183	3	2.2257002	3	1.3780524	3
4	1.6610049	4	5.2321295	3	2.6620440	3	1.6481820	3
5	1.9124840	4	6.0242010	3	3.0650016	3	1.8976475	3
6	2.1483442	4	6.7670859	3	3.4429404	3	2.1316258	3
7	2.3718722	4	7.4711339	3	3.8011232	3	2.3533749	3
8	2.5853055	4	8.1433897	3	4.1431332	3	2.5651127	3
9	2.7902543	4	8.7889251	3	4.4715504	3	2.7684359	3
10	2.9879272	4	9.4115441	3	4.7883096	3	2.9645422	3
11	3.1792594	4	1.0014193	4	5.0949104	3	3.1543592	3
12	3.3649939	4	1.0599212	4	5.3925419	3	3.3386238	3
13	3.5457343	4	1.1168500	4	5.6821706	3	3.5179344	3
14	3.7219776	4	1.1723625	4	5.9645937	3	3.6927846	3
15	3.8941410	4	1.2265901	4	6.2404800	3	3.8635873	3
16	4.0625773	4	1.2796437	4	6.5103942	3	4.0306928	3
17	4.2275911	4	1.3316192	4	6.7748241	3	4.1944030	3
18	4.3894438	4	1.3825993	4	7.0341889	3	4.3549777	3
19	4.5483648	4	1.4326559	4	7.2888565	3	4.5126439	3
20	4.7045556	4	1.4818527	4	7.5391491	3	4.6676020	3
21	4.8581952	4	1.5302457	4	7.7853533	3	4.8200292	3
22	5.0094422	4	1.5778853	4	8.0277235	3	4.9700827	3
23	5.1584389	4	1.6248159	4	8.2664873	3	5.1179034	3
24	5.3053138	4	1.6710785	4	8.5018521	3	5.2636195	3
25	5.4501825	4	1.7167090	4	8.7340013	3	5.4073453	3
26	5.5931505	4	1.7617408	4	8.9631054	3	5.5491856	3
27	5.7343140	4	1.8062044	4	9.1893180	3	5.6892360	3
28	5.8737609	4	1.8501270	4	9.4127788	3	5.8275825	3
29	6.0115712	4	1.8935346	4	9.6336192	3	5.9643065	3
30	6.1478198	4	1.9364498	4	9.8519550	3	6.0994802	3
31	6.2825741	4	1.9788949	4	1.0067898	4	6.2331725	3
32	6.4158994	4	2.0208894	4	1.0281549	4	6.3654464	3
33	6.5478529	4	2.0624521	4	1.0493003	4	6.4963596	3
34	6.6784893	4	2.1035998	4	1.0702347	4	6.6259666	3
35	6.8078614	4	2.1443492	4	1.0909664	4	6.7543180	3
36	6.9360141	4	2.1847148	4	1.1115029	4	6.8814612	3
37	7.0629946	4	2.2247111	4	1.1318513	4	7.0074407	3
38	7.1888435	4	2.2643508	4	1.1520185	4	7.1322976	3
39	7.3136007	4	2.3036467	4	1.1720106	4	7.2560712	3
40	7.4373020	4	2.3426102	4	1.1918337	4	7.3787977	3
41	7.5599836	4	2.3812522	4	1.2114932	4	7.5005123	3
42	7.6816769	4	2.4195832	4	1.2309946	4	7.6212464	3
43	7.8024143	4	2.4576129	4	1.2503426	4	7.7410321	3
44	7.9222242	4	2.4953507	4	1.2695421	4	7.8598981	3
45	8.0411353	4	2.5328051	4	1.2885975	4	7.9778719	3
46	8.1591732	4	2.5699848	4	1.3075130	4	8.0949800	3
47	8.2763635	4	2.6068973	4	1.3262927	4	8.2112466	3
48	8.3927300	4	2.6435504	4	1.3449403	4	8.3266963	3
49	8.5082948	4	2.6799510	4	1.3634595	4	8.4413505	3
50	8.6230801	4	2.7161060	4	1.3818537	4	8.5552310	3

Table 44.

$|\delta^2 \tau_s|$

$\sigma = 5$
$\epsilon_2 = 80$

s	f = 5 kc		f = 6 kc		f = 7 kc		f = 8 kc	
0	1.5963936	2	1.1818412	2	9.1702333	1	7.3644293	1
1	5.0125216	2	3.6999142	2	2.8623040	2	2.2917274	2
2	7.4323981	2	5.4853773	2	4.2430074	2	3.3967611	2
3	9.5011918	2	7.0119280	2	5.4235914	2	4.3417088	2
4	1.1363412	3	8.3860911	2	6.4863556	2	5.1923779	2
5	1.3083202	3	9.6551720	2	7.4678656	2	5.9780208	2
6	1.4696245	3	1.0845492	3	8.3884693	2	6.7149183	2
7	1.6224987	3	1.1973612	3	9.2609720	2	7.4133171	2
8	1.7684719	3	1.3050808	3	1.0094094	3	8.0801960	2
9	1.9086442	3	1.4085203	3	1.0894114	3	8.7205805	2
10	2.0438414	3	1.5082886	3	1.1665744	3	9.3382402	2
11	2.1747034	3	1.6048579	3	1.2412631	3	9.9360957	2
12	2.3017374	3	1.6986025	3	1.3137674	3	1.0516467	3
13	2.4253561	3	1.7898268	3	1.3843225	3	1.1081237	3
14	2.5458998	3	1.8787822	3	1.4531227	3	1.1631959	3
15	2.6636535	3	1.9656786	3	1.5203306	3	1.2169957	3
16	2.7788584	3	2.0506941	3	1.5860840	3	1.2696270	3
17	2.8917226	3	2.1339827	3	1.6505015	3	1.3211910	3
18	3.0024251	3	2.2156756	3	1.7136851	3	1.3717676	3
19	3.1111226	3	2.2958894	3	1.7757245	3	1.4214282	3
20	3.2179532	3	2.3747252	3	1.8366983	3	1.4702359	3
21	3.3230385	3	2.4522734	3	1.8966762	3	1.5182463	3
22	3.4264878	3	2.5286141	3	1.9557202	3	1.5655092	3
23	3.5283979	3	2.6038189	3	2.0138859	3	1.6120691	3
24	3.6288567	3	2.6779530	3	2.0712233	3	1.6579659	3
25	3.7279436	3	2.7510747	3	2.1277776	3	1.7032360	3
26	3.8257305	3	2.8232370	3	2.1835901	3	1.7479122	3
27	3.9222837	3	2.8944888	3	2.2386983	3	1.7920247	3
28	4.0176621	3	2.9648738	3	2.2931360	3	1.8356005	3
29	4.1119220	3	3.0344333	3	2.3469354	3	1.8786654	3
30	4.2051131	3	3.1032040	3	2.4001247	3	1.9212418	3
31	4.2972828	3	3.1712213	3	2.4527312	3	1.9633518	3
32	4.3884748	3	3.2385165	3	2.5047794	3	2.0050150	3
33	4.4787285	3	3.3051197	3	2.5562924	3	2.0462496	3
34	4.5680816	3	3.3710584	3	2.6072912	3	2.0870727	3
35	4.6565692	3	3.4363585	3	2.6577963	3	2.1275006	3
36	4.7442241	3	3.5010436	3	2.7078258	3	2.1675477	3
37	4.8310764	3	3.5651370	3	2.7573975	3	2.2072284	3
38	4.9171551	3	3.6286590	3	2.8065274	3	2.2465555	3
39	5.0024867	3	3.6916300	3	2.8552311	3	2.2855414	3
40	5.0870965	3	3.7540685	3	2.9035227	3	2.3241975	3
41	5.1710086	3	3.8159917	3	2.9514162	3	2.3625347	3
42	5.2542451	3	3.8774166	3	2.9989240	3	2.4005635	3
43	5.3368274	3	3.9383587	3	3.0460585	3	2.4382933	3
44	5.4187757	3	3.9988330	3	3.0928311	3	2.4757336	3
45	5.5001091	3	4.0588532	3	3.1392526	3	2.5128926	3
46	5.5808452	3	4.1184333	3	3.1853335	3	2.5497790	3
47	5.6610018	3	4.1775850	3	3.2310833	3	2.5864005	3
48	5.7405946	3	4.2363212	3	3.2765116	3	2.6227647	3
49	5.8196394	3	4.2946527	3	3.3216271	3	2.6588783	3
50	5.8981508	3	4.3525906	3	3.3664379	3	2.6947482	3

Table 45.

$\lfloor \delta^2 \tau_s \rfloor$

$\sigma = 5$
$\epsilon_2 = 80$

s	f = 9 kc	
0	6.0716974	1
1	1.8836828	2
2	2.7916083	2
3	3.5680667	2
4	4.2670778	2
5	4.9126647	2
6	5.5182014	2
7	6.0921052	2
8	6.6401106	2
9	7.1663455	2
10	7.6739075	2
11	8.1651970	2
12	8.6421182	2
13	9.1062193	2
14	9.5587783	2
15	1.0000864	3
16	1.0433382	3
17	1.0857113	3
18	1.1272729	3
19	1.1680818	3
20	1.2081898	3
21	1.2476428	3
22	1.2864815	3
23	1.3247424	3
24	1.3624586	3
25	1.3996596	3
26	1.4363727	3
27	1.4726225	3
28	1.5084313	3
29	1.5438202	3
30	1.5788078	3
31	1.6134120	3
32	1.6476491	3
33	1.6815341	3
34	1.7150809	3
35	1.7483029	3
36	1.7812120	3
37	1.8138201	3
38	1.8461374	3
39	1.8781744	3
40	1.9099405	3
41	1.9414446	3
42	1.9726950	3
43	2.0036998	3
44	2.0344668	3
45	2.0650027	3
46	2.0953145	3
47	2.1254086	3
48	2.1552912	3
49	2.1849679	3
50	2.2144444	3

Table 46.

$|\delta^2 \tau_s|$

$\sigma = 5$

$\epsilon_2 = 80$

s	f = 10 kc		f = 20 kc		f = 30 kc		f = 50 kc	
0	4.9489689	4	1.5598312	4	7.9405781	3	3.3930854	3
1	1.5767189	5	4.9666599	4	2.5269907	4	1.0787016	4
2	2.3396404	5	7.3696120	4	3.7494741	4	1.6004536	4
3	2.9915821	5	9.4230546	4	4.7941665	4	2.0463401	4
4	3.5783270	5	1.1271158	5	5.7343990	4	2.4476470	4
5	4.1201487	5	1.2977772	5	6.6026508	4	2.8182341	4
6	4.6283130	5	1.4578377	5	7.4169713	4	3.1658036	4
7	5.1099040	5	1.6095283	5	8.1887110	4	3.4951995	4
8	5.5697434	5	1.7543679	5	8.9255961	4	3.8097189	4
9	6.0113019	5	1.8934496	5	9.6331874	4	4.1117359	4
10	6.4371832	5	2.0275931	5	1.0315655	5	4.4030302	4

	f = 60 kc		f = 70 kc		f = 80 kc		f = 90 kc	
0	2.5053158	3	1.9387289	3	1.5527211	3	1.2766345	3
1	7.9607535	3	6.1573982	3	4.9290657	3	4.0507055	3
2	1.1810929	4	9.1351479	3	7.3125974	3	6.0093376	3
3	1.5101323	4	1.1679998	4	9.3496475	3	7.6832801	3
4	1.8062763	4	1.3970444	4	1.1183068	4	9.1898984	3
5	2.0797513	4	1.6085570	4	1.2876156	4	1.0581202	4
6	2.3362411	4	1.8069330	4	1.4464093	4	1.1886100	4
7	2.5793198	4	1.9949370	4	1.5969006	4	1.3122774	4
8	2.8114210	4	2.1744505	4	1.7405958	4	1.4303601	4
9	3.0342956	4	2.3468283	4	1.8785791	4	1.5437491	4
10	3.2492579	4	2.5130863	4	2.0116639	4	1.6531127	4

	f = 100 kc		f = 200 kc		f = 300 kc		f = 400 kc	
0	1.0715919	3	3.3924589	2	1.7346397	2	1.0793813	2
1	3.3985064	3	1.0709207	3	5.4505963	2	3.3758053	2
2	5.0416551	3	1.5883273	3	8.0822342	2	5.0046464	2
3	6.4459905	3	2.0305978	3	1.0332019	3	6.3973258	2
4	7.7099593	3	2.4286836	3	1.2357143	3	7.6509934	2
5	8.8771880	3	2.7963112	3	1.4227369	3	8.8087996	2
6	9.9719297	3	3.1411143	3	1.5981505	3	9.8947530	2
7	1.1009436	4	3.4678937	3	1.7643966	3	1.0923962	3
8	1.2000090	4	3.7799189	3	1.9231377	3	1.1906715	3
9	1.2951368	4	4.0795429	3	2.0755707	3	1.2850419	3
10	1.3868873	4	4.3685316	3	2.2225933	3	1.3760631	3

	f = 500 kc		f = 600 kc		f = 700 kc		f = 800 kc	
0	7.4796899	1	5.5484636	1	4.3140580	1	3.4718129	1
1	2.3281990	2	1.7187276	2	1.3297872	2	1.0648291	2
2	3.4508590	2	2.5469885	2	1.9702261	2	1.5773522	2
3	4.4108724	2	3.2553464	2	2.5180235	2	2.0157944	2
4	5.2751019	2	3.8930586	2	3.0112107	2	2.4105464	2
5	6.0732674	2	4.4820357	2	3.4667181	2	2.7751471	2
6	6.8219098	2	5.0344769	2	3.8939747	2	3.1171399	2
7	7.5314393	2	5.5580605	2	4.2989168	2	3.4412736	2
8	8.2089470	2	6.0580171	2	4.6855877	2	3.7507847	2
9	8.8595376	2	6.5381127	2	5.0568999	2	4.0480027	2
10	9.4870409	2	7.0011733	2	5.4150383	2	4.3346765	2

Table 47.

$[\delta^2 \tau_s]$

$\sigma = 5$
$\epsilon_2 = 80$

s	f = 900 kc		f = 1000 kc		f = 1100 kc		f = 1200 kc	
0	2.8685107	1	2.4197883	1	2.0758682	1	1.8057328	1
1	8.7533634	1	7.3461642	1	6.2693139	1	5.4248200	1
2	1.2964006	2	1.0877793	2	9.2814616	1	8.0296771	1
3	1.6566510	2	1.3899752	2	1.1859253	2	1.0259209	2
4	1.9810173	2	1.6620822	2	1.4180485	2	1.2266935	2
5	2.2806156	2	1.9134171	2	1.6324567	2	1.4121478	2
6	2.5616399	2	2.1491735	2	1.8335777	2	1.5861114	2
7	2.8279916	2	2.3726224	2	2.0242011	2	1.7509962	2
8	3.0823285	2	2.5859931	2	2.2062279	2	1.9084462	2
9	3.3265649	2	2.7908913	2	2.3810273	2	2.0596453	2
10	3.5621376	2	2.9885217	2	2.5496274	2	2.2054824	2

	f = 1300 kc		f = 1400 kc		f = 1500 kc		f = 1600 kc	
0	1.5891828	1	1.4125708	1	1.2663899	1	1.1438392	1
1	4.7489137	1	4.1985416	1	3.7437339	1	3.3630659	1
2	7.0278656	1	6.2121806	1	5.5381780	1	4.9740879	1
3	8.9787169	1	7.9361523	1	7.0747005	1	6.3537463	1
4	1.0735567	2	9.4887563	1	8.4585518	1	7.5963772	1
5	1.2358410	2	1.0922965	2	9.7369043	1	8.7443010	1
6	1.3880724	2	1.2268345	2	1.0936097	2	9.8211558	1
7	1.5323602	2	1.3543534	2	1.2072734	2	1.0841845	2
8	1.6701426	2	1.4761236	2	1.3158138	2	1.1816532	2
9	1.8024558	2	1.5930606	2	1.4200463	2	1.2752539	2
10	1.9300768	2	1.7058512	2	1.5205833	2	1.3655364	2

	f = 1700 kc		f = 1800 kc		f = 1900 kc		f = 2000 kc	
0	1.0399437	1	9.5099074		8.7416016		8.0727725	
1	3.0408755	1	2.7654830	1	2.5280221	1	2.3216606	1
2	4.4966870	1	4.0886575	1	3.7368533	1	3.4311445	1
3	5.7436030	1	5.2221320	1	4.7725284	1	4.3818435	1
4	6.8667276	1	6.2431251	1	5.7054715	1	5.2382803	1
5	7.9042768	1	7.1863459	1	6.5673682	1	6.0295147	1
6	8.8776022	1	8.0711926	1	7.3759350	1	6.7718010	1
7	9.8001702	1	8.9099031	1	8.1423486	1	7.4753950	1
8	1.0681162	2	9.7108213	1	8.8742324	1	8.1472933	1
9	1.1527197	2	1.0479963	2	9.5770803	1	8.7925381	1
10	1.2343241	2	1.1221841	2	1.0255017	2	9.4149156	1

	f = 2500 kc		f = 3000 kc		f = 3500 kc		f = 4000 kc	
0	5.733067		4.358395		3.47183		2.86104	
1	1.603294	1	1.185190	1	9.18273		7.36379	
2	2.3671319	1	1.748049	1	1.352937	1	1.083752	1
3	3.0221565	1	2.231122	1	1.726316	1	1.382429	1
4	3.6123784	1	2.6665157	1	2.0629332	1	1.6517746	1
5	4.1577280	1	3.0688546	1	2.3740323	1	1.9007339	1
6	4.6693736	1	3.4463530	1	2.6659440	1	2.1343549	1
7	5.1543694	1	3.8042038	1	2.9426743	1	2.3558355	1
8	5.6175299	1	4.1459532	1	3.2069610	1	2.5673632	1
9	6.0623262	1	4.4741592	1	3.4607793	1	2.7705166	1
10	6.4913658	1	4.7907438	1	3.7056137	1	2.9664824	1

Table 48.

$|\delta^2 \tau_s|$

$\sigma = 5$
$\epsilon_2 = 80$

s	f = 4500 kc		f = 5000 kc		f = 6000 kc		f = 7000 kc	
0	2.41896		2.0865		1.6236		1.3196	
1	6.06256		5.09600		3.7760		2.9334	
2	8.912217		7.48237		5.53000		4.28388	
3	1.13649	1	9.538546		7.044976		5.45358	
4	1.3577375	1	1.139392	1	8.412950		6.510597	
5	1.5622663	1	1.3109339	1	9.678109		7.488498	
6	1.7542080	1	1.4719307	1	1.086569	1	8.406597	
7	1.9361836	1	1.6245753	1	1.1991771	1	9.277245	
8	2.1099868	1	1.7703692	1	1.3067384	1	1.0108930	1
9	2.2769128	1	1.9103972	1	1.4100507	1	1.0907801	1
10	2.4379354	1	2.0454754	1	1.5097143	1	1.1678486	1

	f = 8000 kc		f = 9000 kc		f = 10000 kc	
0	1.106		9.479	- 1	8.265	- 1
1	2.3594		1.949		1.645	
2	3.4349		2.8278		2.3770	
3	4.36944		3.59409		3.0183	
4	5.21467		4.28788		3.59967	
5	5.996930		4.93025		4.13816	
6	6.731492		5.533573		4.64405	
7	7.428169		6.105856		5.123971	
8	8.093721		6.652616		5.582530	
9	8.733046		7.177860		6.023071	
10	9.3498378		7.684612		6.448123	

Table 49.

σ = 5 mhos/meter ϵ_2 = 80

f = 0.1 kilocycles

s	Re τ_s	Im τ_s	$\lvert\tau_s\rvert$	Arg τ_s
0	4.0436029 - 1	7.0026851 - 1	8.0863045 - 1	1.0471332
1	1.2890644	2.2326923	2.5781005	1.0471912
2	1.9128687	3.3131637	3.8257184	1.0471947
3	2.4459188	4.2364383	4.8916226	1.0471958
4	2.9256577	5.0673734	5.8513030	1.0471964
5	3.3686644	5.8348854	6.7373180	1.0471967
6	3.7841511	6.5543507	7.5682925	1.0471966
7	4.1779098	7.2365421	8.3558110	1.0471969
8	4.5538839	7.8875490	9.1077600	1.0471971
9	4.9149108	8.5128666	9.8298140	1.0471972
10	5.2631190	9.1159814	1.0526231 1	1.0471972
11	5.6001573	9.6997493	1.1200308 1	1.0471972
12	5.9273340	1.0266437 1	1.1854663 1	1.0471973
13	6.2457129	1.0817885 1	1.2491420 1	1.0471973
14	6.5561697	1.1355612 1	1.3112333 1	1.0471973
15	6.8594391	1.1880891 1	1.3718873 1	1.0471974
16	7.1561434	1.2394798 1	1.4312262 1	1.0471974
17	7.4468178	1.2898261 1	1.4893631 1	1.0471974
18	7.7319242	1.3392080 1	1.5463844 1	1.0471974
19	8.0118661	1.3876954 1	1.6023728 1	1.0471974
20	8.2869990	1.4353498 1	1.6573993 1	1.0471974
21	8.5576370	1.4822257 1	1.7115270 1	1.0471974
22	8.8240604	1.5283716 1	1.7648117 1	1.0471974
23	9.0865198	1.5738309 1	1.8173035 1	1.0471973
24	9.3452413	1.6186428 1	1.8690479 1	1.0471973
25	9.6004292	1.6628426 1	1.9200854 1	1.0471973
26	9.8522686	1.7064625 1	1.9704333 1	1.0471973
27	1.0100930 1	1.7495319 1	2.0201856 1	1.0471973
28	1.0346566 1	1.7920773 1	2.0693128 1	1.0471973
29	1.0589321 1	1.8341237 1	2.1178638 1	1.0471973
30	1.0829323 1	1.8756933 1	2.1658642 1	1.0471973
31	1.1066695 1	1.9168073 1	2.2133386 1	1.0471973
32	1.1301548 1	1.9574851 1	2.2603093 1	1.0471973
33	1.1533985 1	1.9977444 1	2.3067967 1	1.0471973
34	1.1764102 1	2.0376019 1	2.3528201 1	1.0471973
35	1.1991991 1	2.0770734 1	2.3983979 1	1.0471973
36	1.2217734 1	2.1161732 1	2.4435465 1	1.0471973
37	1.2441411 1	2.1549152 1	2.4882819 1	1.0471973
38	1.2663094 1	2.1933119 1	2.5326186 1	1.0471973
39	1.2882854 1	2.2313754 1	2.5765705 1	1.0471973
40	1.3100755 1	2.2691170 1	2.6201507 1	1.0471973
41	1.3316859 1	2.3065472 1	2.6633714 1	1.0471973
42	1.3531223 1	2.3436761 1	2.7062442 1	1.0471973
43	1.3743902 1	2.3805132 1	2.7487800 1	1.0471973
44	1.3954948 1	2.4170675 1	2.7909893 1	1.0471973
45	1.4164409 1	2.4533474 1	2.8328816 1	1.0471973
46	1.4372334 1	2.4893610 1	2.8744665 1	1.0471973
47	1.4578765 1	2.5251159 1	2.9157528 1	1.0471973
48	1.4783745 1	2.5606195 1	2.9567488 1	1.0471973
49	1.4987313 1	2.5958785 1	2.9974624 1	1.0471973
50	1.5189507 1	2.6308996 1	3.0379015 1	1.0471973

Table 50.

σ = 5 mhos/meter ϵ_2 = 80

f = 0.1 kilocycles

s	Re τ_s		Im τ_s		$\lvert\tau_s\rvert$		Arg τ_s
51	1.5390366	1	2.6656894	1	3.0780731	1	1.0471976
52	1.5589922	1	2.7002535	1	3.1179843	1	1.0471976
53	1.5788208	1	2.7345977	1	3.1576415	1	1.0471976
54	1.5985259	1	2.7687278	1	3.1970516	1	1.0471975
55	1.6181099	1	2.8026483	1	3.2362196	1	1.0471975
56	1.6375764	1	2.8363653	1	3.2751527	1	1.0471976
57	1.6569277	1	2.8698828	1	3.3138553	1	1.0471976
58	1.6761669	1	2.9032060	1	3.3523337	1	1.0471976
59	1.6952960	1	2.9363386	1	3.3905919	1	1.0471976
60	1.7143179	1	2.9692855	1	3.4286356	1	1.0471976
61	1.7332348	1	3.0020505	1	3.4664694	1	1.0471976
62	1.7520491	1	3.0346379	1	3.5040981	1	1.0471976
63	1.7707630	1	3.0670513	1	3.5415258	1	1.0471976
64	1.7893783	1	3.0992939	1	3.5787564	1	1.0471976
65	1.8078975	1	3.1313701	1	3.6157948	1	1.0471976
66	1.8263221	1	3.1632825	1	3.6526440	1	1.0471976
67	1.8446543	1	3.1950348	1	3.6893085	1	1.0471976
68	1.8628960	1	3.2266302	1	3.7257918	1	1.0471975
69	1.8810486	1	3.2580715	1	3.7620970	1	1.0471976
70	1.8991143	1	3.2893622	1	3.7982284	1	1.0471976
71	1.9170942	1	3.3205044	1	3.8341882	1	1.0471976
72	1.9349903	1	3.3515013	1	3.8699805	1	1.0471976
73	1.9528042	1	3.3823558	1	3.9056082	1	1.0471976
74	1.9705368	1	3.4130697	1	3.9410735	1	1.0471976
75	1.9881902	1	3.4436462	1	3.9763802	1	1.0471976
76	2.0057657	1	3.4740878	1	4.0115312	1	1.0471976
77	2.0232644	1	3.5043965	1	4.0465287	1	1.0471976
78	2.0406876	1	3.5345744	1	4.0813750	1	1.0471976
79	2.0580371	1	3.5646245	1	4.1160740	1	1.0471976
80	2.0753134	1	3.5945481	1	4.1506267	1	1.0471976
81	2.0925182	1	3.6243476	1	4.1850362	1	1.0471976
82	2.1096526	1	3.6540252	1	4.2193049	1	1.0471976
83	2.1267180	1	3.6835834	1	4.2534359	1	1.0471976
84	2.1437147	1	3.7130225	1	4.2874292	1	1.0471976
85	2.1606446	1	3.7423459	1	4.3212890	1	1.0471976
86	2.1775082	1	3.7715546	1	4.3550162	1	1.0471976
87	2.1943067	1	3.8006504	1	4.3886131	1	1.0471976
88	2.2110415	1	3.8296360	1	4.4220829	1	1.0471976
89	2.2277131	1	3.8585120	1	4.4554260	1	1.0471976
90	2.2443223	1	3.8872801	1	4.4886446	1	1.0471976
91	2.2608704	1	3.9159422	1	4.5217406	1	1.0471976
92	2.2773582	1	3.9444998	1	4.5547162	1	1.0471976
93	2.2937865	1	3.9729545	1	4.5875728	1	1.0471976
94	2.3101564	1	4.0013080	1	4.6203127	1	1.0471976
95	2.3264682	1	4.0295609	1	4.6529362	1	1.0471976
96	2.3427231	1	4.0577152	1	4.6854461	1	1.0471976
97	2.3589218	1	4.0857721	1	4.7178434	1	1.0471976
98	2.3750651	1	4.1137332	1	4.7501300	1	1.0471976
99	2.3911536	1	4.1415992	1	4.7823070	1	1.0471976
100	2.4071882	1	4.1693720	1	4.8143762	1	1.0471976

Table 51.

σ = 5 mhos/meter ϵ_2 = 80

f = 0.2 kilocycles

s	Re τ_s	Im τ_s	$\lvert\tau_s\rvert$	Arg τ_s
0	4.0440098 - 1	7.0025762 - 1	8.0864140 - 1	1.0470829
1	1.2890772	2.2326889	2.5781039	1.0471863
2	1.9128773	3.3131613	3.8257206	1.0471924
3	2.4459255	4.2364365	4.8918244	1.0471944
4	2.9256633	5.0673719	5.8513045	1.0471954
5	3.3686693	5.8346841	6.7373195	1.0471959
6	3.7841554	6.5543295	7.5682935	1.0471963
7	4.1779138	7.2365410	8.3558120	1.0471965
8	4.5538875	7.8875480	9.1077605	1.0471967
9	4.9149141	8.5128657	9.8298150	1.0471968
10	5.2631221	9.1159806	1.0526232 1	1.0471969
11	5.6001602	9.6997485	1.1200309 1	1.0471970
12	5.9273368	1.0266436 1	1.1854663 1	1.0471971
13	6.2457155	1.0817884 1	1.2491420 1	1.0471971
14	6.5561722	1.1355611 1	1.3112334 1	1.0471971
15	6.8594415	1.1880891 1	1.3718874 1	1.0471972
16	7.1561457	1.2394798 1	1.4312283 1	1.0471972
17	7.4468200	1.2898261 1	1.4893632 1	1.0471973
18	7.7319263	1.3392080 1	1.5463845 1	1.0471973
19	8.0118682	1.3876954 1	1.6023729 1	1.0471973
20	8.2870010	1.4353498 1	1.6573995 1	1.0471973
21	8.5576389	1.4822257 1	1.7115271 1	1.0471973
22	8.8240622	1.5285716 1	1.7648117 1	1.0471974
23	9.0865216	1.5738309 1	1.8173037 1	1.0471974
24	9.3452430	1.6186428 1	1.8690480 1	1.0471974
25	9.6004309	1.6628426 1	1.9200855 1	1.0471974
26	9.8522703	1.7064625 1	1.9704534 1	1.0471974
27	1.0100932 1	1.7495319 1	2.0201857 1	1.0471974
28	1.0346568 1	1.7920773 1	2.0693129 1	1.0471974
29	1.0589323 1	1.8341237 1	2.1178639 1	1.0471974
30	1.0829324 1	1.8756933 1	2.1658643 1	1.0471974
31	1.1066696 1	1.9168073 1	2.2133386 1	1.0471974
32	1.1301549 1	1.9574850 1	2.2603092 1	1.0471974
33	1.1533986 1	1.9977443 1	2.3067966 1	1.0471974
34	1.1764103 1	2.0376018 1	2.3528201 1	1.0471975
35	1.1991992 1	2.0770733 1	2.3983979 1	1.0471975
36	1.2217735 1	2.1161731 1	2.4435464 1	1.0471975
37	1.2441412 1	2.1549151 1	2.4882818 1	1.0471975
38	1.2663095 1	2.1933118 1	2.5326185 1	1.0471975
39	1.2882855 1	2.2313753 1	2.5765705 1	1.0471975
40	1.3100756 1	2.2691169 1	2.6201507 1	1.0471975
41	1.3316860 1	2.3065471 1	2.6633714 1	1.0471975
42	1.3531224 1	2.3436760 1	2.7062442 1	1.0471975
43	1.3743903 1	2.3805131 1	2.7487800 1	1.0471975
44	1.3954949 1	2.4170674 1	2.7909892 1	1.0471975
45	1.4164411 1	2.4533473 1	2.8328817 1	1.0471975
46	1.4372336 1	2.4893609 1	2.8744666 1	1.0471975
47	1.4578767 1	2.5251158 1	2.9157528 1	1.0471975
48	1.4783747 1	2.5606194 1	2.9567488 1	1.0471975
49	1.4987315 1	2.5958784 1	2.9974624 1	1.0471975
50	1.5189508 1	2.6308995 1	3.0379012 1	1.0471975

Table 52.

σ = 5 mhos/meter ϵ_2 = 80

s	Re τ_s		Im τ_s		$\lvert\tau_s\rvert$		Arg τ_s
			f = 0.2 kilocycles				
51	1.5390367	1	2.6656893	1	3.0780730	1	1.0471975
52	1.5589923	1	2.7002534	1	3.1179842	1	1.0471975
53	1.5788209	1	2.7345976	1	3.1576415	1	1.0471975
54	1.5985260	1	2.7687277	1	3.1970516	1	1.0471975
55	1.6181100	1	2.8026482	1	3.2362196	1	1.0471975
56	1.6375765	1	2.8363652	1	3.2751525	1	1.0471975
57	1.6569278	1	2.8698827	1	3.3138552	1	1.0471975
58	1.6761670	1	2.9032059	1	3.3523335	1	1.0471975
59	1.6952961	1	2.9363385	1	3.3905919	1	1.0471975
60	1.7143180	1	2.9692854	1	3.4286356	1	1.0471975
61	1.7332349	1	3.0020504	1	3.4664694	1	1.0471975
62	1.7520492	1	3.0346378	1	3.5040981	1	1.0471975
63	1.7707631	1	3.0670512	1	3.5415258	1	1.0471975
64	1.7893784	1	3.0992938	1	3.5787564	1	1.0471975
65	1.8078976	1	3.1313700	1	3.6157948	1	1.0471975
66	1.8263222	1	3.1632824	1	3.6526441	1	1.0471975
67	1.8446544	1	3.1950347	1	3.6893085	1	1.0471975
68	1.8628961	1	3.2266301	1	3.7257918	1	1.0471975
69	1.8810487	1	3.2580714	1	3.7620969	1	1.0471975
70	1.8991144	1	3.2893621	1	3.7982284	1	1.0471975
71	1.9170943	1	3.3205043	1	3.8341883	1	1.0471975
72	1.9349904	1	3.3515012	1	3.8699804	1	1.0471975
73	1.9528043	1	3.3823557	1	3.9056082	1	1.0471975
74	1.9705369	1	3.4130696	1	3.9410735	1	1.0471975
75	1.9881903	1	3.4436461	1	3.9763802	1	1.0471975
76	2.0057658	1	3.4740877	1	4.0115310	1	1.0471975
77	2.0232645	1	3.5043965	1	4.0465287	1	1.0471975
78	2.0406877	1	3.5345744	1	4.0813750	1	1.0471975
79	2.0580372	1	3.5646245	1	4.1160740	1	1.0471975
80	2.0753135	1	3.5945481	1	4.1506267	1	1.0471976
81	2.0925185	1	3.6243476	1	4.1850363	1	1.0471975
82	2.1096527	1	3.6540252	1	4.2193051	1	1.0471975
83	2.1267181	1	3.6835834	1	4.2534359	1	1.0471975
84	2.1437148	1	3.7130225	1	4.2874292	1	1.0471975
85	2.1606447	1	3.7423459	1	4.3212891	1	1.0471975
86	2.1775083	1	3.7715546	1	4.3550162	1	1.0471975
87	2.1943068	1	3.8006504	1	4.3886131	1	1.0471975
88	2.2110416	1	3.8296360	1	4.4220829	1	1.0471975
89	2.2277132	1	3.8585120	1	4.4554260	1	1.0471975
90	2.2443224	1	3.8872801	1	4.4886446	1	1.0471976
91	2.2608705	1	3.9159422	1	4.5217406	1	1.0471975
92	2.2773583	1	3.9444998	1	4.5547163	1	1.0471975
93	2.2937866	1	3.9729545	1	4.5875728	1	1.0471975
94	2.3101565	1	4.0013080	1	4.6203127	1	1.0471975
95	2.3264683	1	4.0295609	1	4.6529363	1	1.0471975
96	2.3427232	1	4.0577152	1	4.6854461	1	1.0471975
97	2.3589219	1	4.0857721	1	4.7178435	1	1.0471975
98	2.3750652	1	4.1137332	1	4.7501301	1	1.0471975
99	2.3911537	1	4.1415992	1	4.7823070	1	1.0471975
100	2.4071883	1	4.1693720	1	4.8143763	1	1.0471975

Table 53.

σ = 5 mhos/meter ϵ_2 = 80

f = 0.5 kilocycles

s	Re τ_s	Im τ_s	$\lceil \tau_s \rceil$	Arg τ_s
0	4.0450722 - 1	7.0022917 - 1	8.0866990 - 1	1.0469516
1	1.2891105	2.2326800	2.5781129	1.0471734
2	1.9128998	3.3131553	3.8257266	1.0471866
3	2.4459431	4.2364318	4.8918291	1.0471909
4	2.9256780	5.0673679	5.8513085	1.0471929
5	3.3686821	5.8346807	6.7373230	1.0471940
6	3.7841668	6.5543265	7.5682965	1.0471948
7	4.1779241	7.2363382	8.3558150	1.0471953
8	4.5538970	7.8875455	9.1077635	1.0471956
9	4.9149229	8.5128633	9.8298175	1.0471959
10	5.2631303	9.1159784	1.0526234 1	1.0471961
11	5.6001679	9.6997465	1.1200311 1	1.0471963
12	5.9273441	1.0266434 1	1.1854665 1	1.0471964
13	6.2457224	1.0817883 1	1.2491423 1	1.0471966
14	6.5561788	1.1355610 1	1.3112336 1	1.0471966
15	6.8594477	1.1880889 1	1.3718876 1	1.0471968
16	7.1561517	1.2394796 1	1.4312284 1	1.0471968
17	7.4468258	1.2898259 1	1.4893633 1	1.0471969
18	7.7319319	1.3392078 1	1.5463846 1	1.0471969
19	8.0118735	1.3876952 1	1.6023730 1	1.0471970
20	8.2870062	1.4353496 1	1.6573996 1	1.0471970
21	8.5576439	1.4822255 1	1.7115272 1	1.0471970
22	8.8240671	1.5283715 1	1.7648119 1	1.0471971
23	9.0865264	1.5738308 1	1.8173038 1	1.0471971
24	9.3452476	1.6186427 1	1.8690481 1	1.0471971
25	9.6004354	1.6628425 1	1.9200856 1	1.0471971
26	9.8522747	1.7064624 1	1.9704536 1	1.0471972
27	1.0100936 1	1.7495318 1	2.0201858 1	1.0471972
28	1.0346572 1	1.7920772 1	2.0693130 1	1.0471972
29	1.0589327 1	1.8341236 1	2.1178640 1	1.0471972
30	1.0829328 1	1.8756932 1	2.1658644 1	1.0471973
31	1.1066700 1	1.9168072 1	2.2133387 1	1.0471973
32	1.1301553 1	1.9574849 1	2.2603093 1	1.0471973
33	1.1533990 1	1.9977442 1	2.3067968 1	1.0471973
34	1.1764107 1	2.0376017 1	2.3528202 1	1.0471973
35	1.1991996 1	2.0770732 1	2.3983980 1	1.0471973
36	1.2217739 1	2.1161730 1	2.4435466 1	1.0471973
37	1.2441415 1	2.1549150 1	2.4882819 1	1.0471973
38	1.2663098 1	2.1933117 1	2.5326186 1	1.0471974
39	1.2882858 1	2.2313752 1	2.5765705 1	1.0471973
40	1.3100759 1	2.2691168 1	2.6201508 1	1.0471974
41	1.3316863 1	2.3065470 1	2.6633715 1	1.0471973
42	1.3531227 1	2.3436759 1	2.7062442 1	1.0471973
43	1.3743906 1	2.3805130 1	2.7487800 1	1.0471973
44	1.3954952 1	2.4170673 1	2.7909893 1	1.0471974
45	1.4164414 1	2.4533472 1	2.8328817 1	1.0471974
46	1.4372339 1	2.4893609 1	2.8744668 1	1.0471974
47	1.4578770 1	2.5251158 1	2.9157529 1	1.0471974
48	1.4783749 1	2.5606194 1	2.9567489 1	1.0471974
49	1.4987317 1	2.5958784 1	2.9974625 1	1.0471974
50	1.5189511 1	2.6308995 1	3.0379014 1	1.0471974

Table 54.

σ = 5 mhos/meter ϵ_2 = 80

f = 0.5 kilocycles

s	Re τ_s		Im τ_s		$\lvert\tau_s\rvert$		Arg τ_s
51	1.5390370	1	2.6656893	1	3.0780732	1	1.0471974
52	1.5589926	1	2.7002534	1	3.1179844	1	1.0471974
53	1.5788212	1	2.7345976	1	3.1576416	1	1.0471974
54	1.5985263	1	2.7687277	1	3.1970516	1	1.0471974
55	1.6181103	1	2.8026482	1	3.2362197	1	1.0471974
56	1.6375768	1	2.8363652	1	3.2751527	1	1.0471974
57	1.6569281	1	2.8698827	1	3.3138553	1	1.0471974
58	1.6761673	1	2.9032059	1	3.3523337	1	1.0471974
59	1.6952964	1	2.9363385	1	3.3905920	1	1.0471974
60	1.7143183	1	2.9692854	1	3.4286358	1	1.0471974
61	1.7332352	1	3.0020504	1	3.4664696	1	1.0471974
62	1.7520495	1	3.0346378	1	3.5040982	1	1.0471975
63	1.7707634	1	3.0670512	1	3.5415260	1	1.0471975
64	1.7893786	1	3.0992938	1	3.5787565	1	1.0471975
65	1.8078978	1	3.1313700	1	3.6157950	1	1.0471975
66	1.8263224	1	3.1632824	1	3.6526443	1	1.0471975
67	1.8446546	1	3.1950347	1	3.6893086	1	1.0471975
68	1.8628963	1	3.2266301	1	3.7257919	1	1.0471975
69	1.8810489	1	3.2580714	1	3.7620970	1	1.0471975
70	1.8991146	1	3.2893621	1	3.7982284	1	1.0471975
71	1.9170945	1	3.3205043	1	3.8341883	1	1.0471975
72	1.9349906	1	3.3515012	1	3.8699805	1	1.0471975
73	1.9528045	1	3.3823557	1	3.9056082	1	1.0471975
74	1.9705371	1	3.4130696	1	3.9410736	1	1.0471975
75	1.9881905	1	3.4436461	1	3.9763803	1	1.0471975
76	2.0057660	1	3.4740877	1	4.0115312	1	1.0471975
77	2.0232647	1	3.5043964	1	4.0465287	1	1.0471975
78	2.0406879	1	3.5345743	1	4.0813750	1	1.0471975
79	2.0580374	1	3.5646244	1	4.1160740	1	1.0471975
80	2.0753137	1	3.5945480	1	4.1506267	1	1.0471975
81	2.0925185	1	3.6243475	1	4.1850363	1	1.0471975
82	2.1096529	1	3.6540251	1	4.2193049	1	1.0471975
83	2.1267183	1	3.6835833	1	4.2534359	1	1.0471975
84	2.1437150	1	3.7130224	1	4.2874292	1	1.0471975
85	2.1606449	1	3.7423458	1	4.3212890	1	1.0471975
86	2.1775085	1	3.7715545	1	4.3550162	1	1.0471975
87	2.1943070	1	3.8006503	1	4.3886132	1	1.0471975
88	2.2110418	1	3.8296359	1	4.4220829	1	1.0471975
89	2.2277134	1	3.8585119	1	4.4554260	1	1.0471975
90	2.2443226	1	3.8872800	1	4.4886446	1	1.0471975
91	2.2608707	1	3.9159421	1	4.5217407	1	1.0471975
92	2.2773585	1	3.9444997	1	4.5547163	1	1.0471975
93	2.2937868	1	3.9729544	1	4.5875729	1	1.0471975
94	2.3101566	1	4.0013079	1	4.6203127	1	1.0471975
95	2.3264684	1	4.0295608	1	4.6529362	1	1.0471975
96	2.3427233	1	4.0577151	1	4.6854461	1	1.0471975
97	2.3589220	1	4.0857720	1	4.7178434	1	1.0471975
98	2.3750653	1	4.1137331	1	4.7501300	1	1.0471975
99	2.3911538	1	4.1415991	1	4.7823070	1	1.0471975
100	2.4071884	1	4.1693719	1	4.8143762	1	1.0471975

Table 55.

σ = 5 mhos/meter ϵ_2 = 80

f = 1 kilocycle

s	Re τ_s	Im τ_s	$\lvert\tau_s\rvert$	Arg τ_s
0	4.0466277 - 1	7.0018754 - 1	8.0871165 - 1	1.0467593
1	1.2891593	2.2326669	2.5781259	1.0471544
2	1.9129326	3.3131465	3.8257354	1.0471780
3	2.4459688	4.2364249	4.8918360	1.0471856
4	2.9256995	5.0673622	5.8513140	1.0471892
5	3.3687007	5.8346757	6.7373280	1.0471913
6	3.7841834	6.5543221	7.5683010	1.0471926
7	4.1779391	7.2363342	8.3558190	1.0471935
8	4.5539108	7.8875418	9.1077670	1.0471941
9	4.9149357	8.5128599	9.8298210	1.0471946
10	5.2631422	9.1159752	1.0526237 1	1.0471950
11	5.6001791	9.6997434	1.1200314 1	1.0471953
12	5.9273547	1.0266432 1	1.1854669 1	1.0471956
13	6.2457324	1.0817880 1	1.2491425 1	1.0471958
14	6.5561884	1.1355607 1	1.3112339 1	1.0471959
15	6.8594569	1.1880886 1	1.3718878 1	1.0471961
16	7.1561605	1.2394794 1	1.4312287 1	1.0471962
17	7.4468342	1.2898257 1	1.4893635 1	1.0471963
18	7.7319400	1.3392076 1	1.5463848 1	1.0471964
19	8.0118814	1.3876950 1	1.6023732 1	1.0471965
20	8.2870138	1.4353494 1	1.6573998 1	1.0471965
21	8.5576512	1.4822254 1	1.7115274 1	1.0471966
22	8.8240742	1.5283713 1	1.7648121 1	1.0471967
23	9.0865333	1.5738306 1	1.8173040 1	1.0471967
24	9.3452543	1.6186425 1	1.8690483 1	1.0471968
25	9.6004419	1.6628423 1	1.9200858 1	1.0471968
26	9.8522810	1.7064622 1	1.9704537 1	1.0471968
27	1.0100942 1	1.7495316 1	2.0201859 1	1.0471969
28	1.0346578 1	1.7920770 1	2.0693131 1	1.0471969
29	1.0589333 1	1.8341234 1	2.1178641 1	1.0471969
30	1.0829334 1	1.8756930 1	2.1658645 1	1.0471970
31	1.1066706 1	1.9168071 1	2.2133390 1	1.0471970
32	1.1301559 1	1.9574848 1	2.2603095 1	1.0471970
33	1.1533995 1	1.9977441 1	2.3067969 1	1.0471971
34	1.1764112 1	2.0376016 1	2.3528204 1	1.0471971
35	1.1992001 1	2.0770731 1	2.3983982 1	1.0471971
36	1.2217744 1	2.1161729 1	2.4435467 1	1.0471971
37	1.2441421 1	2.1549149 1	2.4882821 1	1.0471971
38	1.2663103 1	2.1933116 1	2.5326187 1	1.0471972
39	1.2882863 1	2.2313751 1	2.5765707 1	1.0471972
40	1.3100764 1	2.2691167 1	2.6201509 1	1.0471972
41	1.3316868 1	2.3065469 1	2.6633716 1	1.0471972
42	1.3531232 1	2.3436758 1	2.7062444 1	1.0471972
43	1.3743910 1	2.3805129 1	2.7487802 1	1.0471972
44	1.3954956 1	2.4170672 1	2.7909894 1	1.0471972
45	1.4164418 1	2.4533471 1	2.8328818 1	1.0471972
46	1.4372343 1	2.4893607 1	2.8744668 1	1.0471972
47	1.4578774 1	2.5251156 1	2.9157530 1	1.0471972
48	1.4783754 1	2.5606192 1	2.9567490 1	1.0471972
49	1.4987322 1	2.5958782 1	2.9974626 1	1.0471972
50	1.5189515 1	2.6308993 1	3.0379014 1	1.0471973

Table 56.

σ = 5 mhos/meter ϵ_2 = 80

f = 2 kilocycles

s	Re τ_s	Im τ_s	$\lvert\tau_s\rvert$	Arg τ_s
0	4.0493992 - 1	7.0011346 - 1	8.0878625 - 1	1.0464168
1	1.2892462	2.2326436	2.5781492	1.0471207
2	1.9129912	3.3131308	3.8257511	1.0471627
3	2.4460146	4.2364126	4.8918482	1.0471762
4	2.9257378	5.0673519	5.8513245	1.0471827
5	3.3687340	5.8346668	6.7373365	1.0471863
6	3.7842130	6.5543141	7.5683090	1.0471887
7	4.1779659	7.2363270	8.3558260	1.0471903
8	4.5539354	7.8875352	9.1077735	1.0471914
9	4.9149585	8.5128538	9.8298270	1.0471923
10	5.2631635	9.1159695	1.0526243 1	1.0471930
11	5.6001991	9.6997381	1.1200319 1	1.0471935
12	5.9273736	1.0266426 1	1.1854673 1	1.0471940
13	6.2457504	1.0817875 1	1.2491430 1	1.0471943
14	6.5562055	1.1355603 1	1.3112344 1	1.0471946
15	6.8594732	1.1880882 1	1.3718882 1	1.0471949
16	7.1561762	1.2394789 1	1.4312290 1	1.0471951
17	7.4468493	1.2898253 1	1.4893639 1	1.0471953
18	7.7319545	1.3392072 1	1.5463852 1	1.0471955
19	8.0118954	1.3876946 1	1.6023736 1	1.0471956
20	8.2870273	1.4353491 1	1.6574002 1	1.0471957
21	8.5576643	1.4822250 1	1.7115278 1	1.0471959
22	8.8240869	1.5283709 1	1.7648124 1	1.0471960
23	9.0865456	1.5738302 1	1.8173042 1	1.0471960
24	9.3452663	1.6186422 1	1.8690486 1	1.0471961
25	9.6004536	1.6628420 1	1.9200861 1	1.0471962
26	9.8522924	1.7064619 1	1.9704540 1	1.0471963
27	1.0100953 1	1.7495313 1	2.0201862 1	1.0471963
28	1.0346589 1	1.7920767 1	2.0693134 1	1.0471964
29	1.0589343 1	1.8341232 1	2.1178645 1	1.0471965
30	1.0829345 1	1.8756928 1	2.1658649 1	1.0471965
31	1.1066716 1	1.9168068 1	2.2133392 1	1.0471965
32	1.1301569 1	1.9574845 1	2.2603098 1	1.0471966
33	1.1534005 1	1.9977438 1	2.3067972 1	1.0471966
34	1.1764122 1	2.0376013 1	2.3528206 1	1.0471967
35	1.1992010 1	2.0770728 1	2.3983983 1	1.0471967
36	1.2217753 1	2.1161726 1	2.4435469 1	1.0471967
37	1.2441430 1	2.1549146 1	2.4882823 1	1.0471967
38	1.2663112 1	2.1933114 1	2.5326190 1	1.0471968
39	1.2882872 1	2.2313749 1	2.5765710 1	1.0471968
40	1.3100772 1	2.2691165 1	2.6201512 1	1.0471969
41	1.3316876 1	2.3065467 1	2.6633719 1	1.0471969
42	1.3531240 1	2.3436756 1	2.7062446 1	1.0471969
43	1.3743919 1	2.3805127 1	2.7487804 1	1.0471969
44	1.3954964 1	2.4170670 1	2.7909897 1	1.0471969
45	1.4164426 1	2.4533469 1	2.8328821 1	1.0471969
46	1.4372351 1	2.4893605 1	2.8744670 1	1.0471969
47	1.4578782 1	2.5251154 1	2.9157532 1	1.0471970
48	1.4783761 1	2.5606190 1	2.9567492 1	1.0471970
49	1.4987329 1	2.5958780 1	2.9974628 1	1.0471970
50	1.5189523 1	2.6308991 1	3.0379016 1	1.0471970

Table 57.

σ = 5 mhos/meter ϵ_2 = 80

f = 3 kilocycles

s	Re τ_s	Im τ_s	$\lvert\tau_s\rvert$	Arg τ_s
0	4.0519384 - 1	7.0004568 - 1	8.0885475 - 1	1.0461031
1	1.2893259	2.2326223	2.5781706	1.0470898
2	1.9130449	3.3131164	3.8257654	1.0471486
3	2.4460566	4.2364014	4.8918596	1.0471677
4	2.9257729	5.0673425	5.8513340	1.0471767
5	3.3687645	5.8346586	6.7373450	1.0471818
6	3.7842401	6.5543068	7.5683165	1.0471851
7	4.1779905	7.2363204	8.3558325	1.0471873
8	4.5539579	7.8875291	9.1077795	1.0471890
9	4.9149793	8.5128482	9.8298325	1.0471902
10	5.2631830	9.1159643	1.0526248 1	1.0471911
11	5.6002174	9.6997332	1.1200324 1	1.0471919
12	5.9273909	1.0266422 1	1.1854678 1	1.0471925
13	6.2457668	1.0817871 1	1.2491435 1	1.0471930
14	6.5562211	1.1355598 1	1.3112347 1	1.0471934
15	6.8594882	1.1880878 1	1.3718887 1	1.0471938
16	7.1561905	1.2394786 1	1.4312295 1	1.0471941
17	7.4468631	1.2898249 1	1.4893643 1	1.0471944
18	7.7319678	1.3392069 1	1.5463856 1	1.0471946
19	8.0119082	1.3876943 1	1.6023740 1	1.0471948
20	8.2870397	1.4353487 1	1.6574005 1	1.0471950
21	8.5576763	1.4822247 1	1.7115281 1	1.0471952
22	8.8240986	1.5283706 1	1.7648127 1	1.0471953
23	9.0865569	1.5738299 1	1.8173046 1	1.0471954
24	9.3452773	1.6186419 1	1.8690489 1	1.0471956
25	9.6004643	1.6628417 1	1.9200864 1	1.0471956
26	9.8523028	1.7064616 1	1.9704543 1	1.0471957
27	1.0100963 1	1.7495311 1	2.0201866 1	1.0471959
28	1.0346599 1	1.7920765 1	2.0693138 1	1.0471959
29	1.0589353 1	1.8341229 1	2.1178647 1	1.0471960
30	1.0829354 1	1.8756925 1	2.1658651 1	1.0471961
31	1.1066725 1	1.9168065 1	2.2133394 1	1.0471961
32	1.1301578 1	1.9574843 1	2.2603101 1	1.0471962
33	1.1534014 1	1.9977436 1	2.3067974 1	1.0471962
34	1.1764130 1	2.0376011 1	2.3528208 1	1.0471963
35	1.1992019 1	2.0770726 1	2.3983986 1	1.0471963
36	1.2217761 1	2.1161724 1	2.4435471 1	1.0471964
37	1.2441438 1	2.1549144 1	2.4882825 1	1.0471964
38	1.2663120 1	2.1933111 1	2.5326192 1	1.0471965
39	1.2882880 1	2.2313747 1	2.5765712 1	1.0471965
40	1.3100780 1	2.2691163 1	2.6201514 1	1.0471966
41	1.3316884 1	2.3065465 1	2.6633721 1	1.0471966
42	1.3531247 1	2.3436754 1	2.7062448 1	1.0471966
43	1.3743926 1	2.3805125 1	2.7487806 1	1.0471966
44	1.3954972 1	2.4170668 1	2.7909899 1	1.0471966
45	1.4164433 1	2.4533467 1	2.8328822 1	1.0471967
46	1.4372358 1	2.4893603 1	2.8744672 1	1.0471967
47	1.4578789 1	2.5251152 1	2.9157534 1	1.0471967
48	1.4783768 1	2.5606189 1	2.9567495 1	1.0471968
49	1.4987336 1	2.5958779 1	2.9974630 1	1.0471968
50	1.5189530 1	2.6308990 1	3.0379019 1	1.0471968

Table 58.

σ = 5 mhos/meter ϵ_2 = 80

f = 4 kilocycles

s	Re τ_s	Im τ_s	$\lvert\tau_s\rvert$	Arg τ_s
0	4.0543376 - 1	6.9998172 - 1	8.0891960 - 1	1.0458067
1	1.2894011	2.2326021	2.5781907	1.0470606
2	1.9130956	3.3131029	3.8257792	1.0471354
3	2.4460962	4.2363907	4.8918701	1.0471595
4	2.9258060	5.0673336	5.8513425	1.0471710
5	3.3687933	5.8346509	6.7373525	1.0471775
6	3.7842658	6.5543000	7.5683230	1.0471817
7	4.1780137	7.2363142	8.3558390	1.0471846
8	4.5539792	7.8875234	9.1077855	1.0471866
9	4.9149991	8.5128429	9.8298380	1.0471882
10	5.2632015	9.1159593	1.0526253 1	1.0471894
11	5.6002348	9.6997285	1.1200329 1	1.0471903
12	5.9274073	1.0266417 1	1.1854682 1	1.0471911
13	6.2457824	1.0817866 1	1.2491438 1	1.0471917
14	6.5562359	1.1355594 1	1.3112351 1	1.0471923
15	6.8595023	1.1880874 1	1.3718890 1	1.0471928
16	7.1562041	1.2394782 1	1.4312298 1	1.0471931
17	7.4468761	1.2898246 1	1.4893647 1	1.0471935
18	7.7319804	1.3392065 1	1.5463859 1	1.0471938
19	8.0119203	1.3876940 1	1.6023743 1	1.0471941
20	8.2870514	1.4353484 1	1.6574008 1	1.0471943
21	8.5576877	1.4822244 1	1.7115284 1	1.0471945
22	8.8241096	1.5283703 1	1.7648130 1	1.0471947
23	9.0865676	1.5738297 1	1.8173049 1	1.0471948
24	9.3452877	1.6186416 1	1.8690491 1	1.0471950
25	9.6004744	1.6628414 1	1.9200866 1	1.0471951
26	9.8523127	1.7064614 1	1.9704546 1	1.0471953
27	1.0100973 1	1.7495308 1	2.0201868 1	1.0471954
28	1.0346608 1	1.7920762 1	2.0693139 1	1.0471954
29	1.0589362 1	1.8341226 1	2.1178649 1	1.0471955
30	1.0829363 1	1.8756923 1	2.1658653 1	1.0471957
31	1.1066734 1	1.9168063 1	2.2133397 1	1.0471957
32	1.1301586 1	1.9574840 1	2.2603102 1	1.0471958
33	1.1534022 1	1.9977433 1	2.3067976 1	1.0471959
34	1.1764139 1	2.0376009 1	2.3528211 1	1.0471959
35	1.1992027 1	2.0770724 1	2.3983988 1	1.0471960
36	1.2217769 1	2.1161722 1	2.4435474 1	1.0471961
37	1.2441446 1	2.1549142 1	2.4882828 1	1.0471961
38	1.2663128 1	2.1933109 1	2.5326194 1	1.0471962
39	1.2882887 1	2.2313745 1	2.5765714 1	1.0471962
40	1.3100788 1	2.2691161 1	2.6201516 1	1.0471963
41	1.3316891 1	2.3065463 1	2.6633723 1	1.0471963
42	1.3531255 1	2.3436752 1	2.7062450 1	1.0471963
43	1.3743933 1	2.3805123 1	2.7487808 1	1.0471964
44	1.3954979 1	2.4170666 1	2.7909900 1	1.0471964
45	1.4164440 1	2.4533465 1	2.8328824 1	1.0471964
46	1.4372365 1	2.4893602 1	2.8744675 1	1.0471965
47	1.4578795 1	2.5251151 1	2.9157536 1	1.0471965
48	1.4783775 1	2.5606187 1	2.9567496 1	1.0471965
49	1.4987342 1	2.5958777 1	2.9974632 1	1.0471966
50	1.5189536 1	2.6308988 1	3.0379020 1	1.0471966

Table 59.

σ = 5 mhos/meter ϵ_2 = 80

f = 5 kilocycles

s	Re τ_s	Im τ_s	$\lvert\tau_s\rvert$	Arg τ_s
0	4.0566377 - 1	6.9992047 - 1	8.0898190 - 1	1.0455228
1	1.2894733	2.2325828	2.5782101	1.0470327
2	1.9131442	3.3130898	3.8257921	1.0471227
3	2.4461343	4.2363806	4.8918804	1.0471518
4	2.9258378	5.0673251	5.8513510	1.0471656
5	3.3688209	5.8346435	6.7373600	1.0471734
6	3.7842903	6.5542934	7.5683300	1.0471785
7	4.1780360	7.2363083	8.3558450	1.0471819
8	4.5539996	7.8875180	9.1077910	1.0471844
9	4.9150180	8.5128378	9.8298430	1.0471862
10	5.2632191	9.1159546	1.0526258 1	1.0471877
11	5.6002514	9.6997241	1.1200333 1	1.0471888
12	5.9274230	1.0266413 1	1.1854686 1	1.0471898
13	6.2457972	1.0817862 1	1.2491442 1	1.0471905
14	6.5562501	1.1355591 1	1.3112356 1	1.0471912
15	6.8595159	1.1880871 1	1.3718895 1	1.0471918
16	7.1562171	1.2394778 1	1.4312301 1	1.0471922
17	7.4468886	1.2898242 1	1.4893650 1	1.0471926
18	7.7319924	1.3392062 1	1.5463862 1	1.0471930
19	8.0119319	1.3876937 1	1.6023746 1	1.0471933
20	8.2870626	1.4353481 1	1.6574011 1	1.0471936
21	8.5576985	1.4822241 1	1.7115287 1	1.0471939
22	8.8241201	1.5283700 1	1.7648133 1	1.0471941
23	9.0865778	1.5738294 1	1.8173052 1	1.0471943
24	9.3452976	1.6186413 1	1.8690494 1	1.0471945
25	9.6004841	1.6628412 1	1.9200870 1	1.0471946
26	9.8523221	1.7064611 1	1.9704548 1	1.0471948
27	1.0100982 1	1.7495305 1	2.0201870 1	1.0471949
28	1.0346617 1	1.7920760 1	2.0693142 1	1.0471950
29	1.0589371 1	1.8341224 1	2.1178652 1	1.0471951
30	1.0829372 1	1.8756920 1	2.1658656 1	1.0471952
31	1.1066743 1	1.9168061 1	2.2133399 1	1.0471953
32	1.1301594 1	1.9574838 1	2.2603104 1	1.0471954
33	1.1534031 1	1.9977431 1	2.3067978 1	1.0471955
34	1.1764147 1	2.0376007 1	2.3528213 1	1.0471956
35	1.1992035 1	2.0770722 1	2.3983991 1	1.0471957
36	1.2217777 1	2.1161720 1	2.4435476 1	1.0471957
37	1.2441453 1	2.1549140 1	2.4882829 1	1.0471958
38	1.2663135 1	2.1933107 1	2.5326196 1	1.0471959
39	1.2882895 1	2.2313743 1	2.5765716 1	1.0471959
40	1.3100795 1	2.2691159 1	2.6201518 1	1.0471960
41	1.3316898 1	2.3065461 1	2.6633724 1	1.0471960
42	1.3531262 1	2.3436750 1	2.7062452 1	1.0471961
43	1.3743940 1	2.3805121 1	2.7487810 1	1.0471961
44	1.3954985 1	2.4170664 1	2.7909902 1	1.0471962
45	1.4164447 1	2.4533464 1	2.8328827 1	1.0471962
46	1.4372371 1	2.4893600 1	2.8744676 1	1.0471963
47	1.4578802 1	2.5251149 1	2.9157538 1	1.0471963
48	1.4783781 1	2.5606185 1	2.9567497 1	1.0471963
49	1.4987349 1	2.5958775 1	2.9974633 1	1.0471963
50	1.5189542 1	2.6308986 1	3.0379021 1	1.0471964

Table 60.

σ = 5 mhos/meter ϵ_2 = 80

f = 6 kilocycles

s	Re τ_s	Im τ_s	$\lvert\tau_s\rvert$	Arg τ_s
0	4.0588619 - 1	6.9986130 - 1	8.0904230 - 1	1.0452483
1	1.2895430	2.2325642	2.5782289	1.0470056
2	1.9131912	3.3130772	3.8258048	1.0471104
3	2.4461710	4.2363707	4.8918903	1.0471443
4	2.9258686	5.0673169	5.8513595	1.0471603
5	3.3688476	5.8346364	6.7373670	1.0471695
6	3.7843141	6.5542870	7.5683360	1.0471753
7	4.1780575	7.2363025	8.3558505	1.0471793
8	4.5540194	7.8875127	9.1077960	1.0471822
9	4.9150363	8.5128329	9.8298475	1.0471844
10	5.2632362	9.1159500	1.0526263 1	1.0471861
11	5.6002674	9.6997198	1.1200338 1	1.0471874
12	5.9274381	1.0266409 1	1.1854690 1	1.0471885
13	6.2458116	1.0817859 1	1.2491447 1	1.0471894
14	6.5562638	1.1355587 1	1.3112359 1	1.0471902
15	6.8595290	1.1880867 1	1.3718897 1	1.0471908
16	7.1562296	1.2394775 1	1.4312305 1	1.0471914
17	7.4469007	1.2898239 1	1.4893653 1	1.0471918
18	7.7320040	1.3392059 1	1.5463866 1	1.0471923
19	8.0119431	1.3876934 1	1.6023749 1	1.0471926
20	8.2870735	1.4353478 1	1.6574014 1	1.0471929
21	8.5577090	1.4822238 1	1.7115289 1	1.0471932
22	8.8241303	1.5283698 1	1.7648136 1	1.0471935
23	9.0865877	1.5738291 1	1.8173054 1	1.0471937
24	9.3453073	1.6186411 1	1.8690497 1	1.0471939
25	9.6004935	1.6628409 1	1.9200872 1	1.0471941
26	9.8523313	1.7064609 1	1.9704551 1	1.0471943
27	1.0100991 1	1.7495303 1	2.0201873 1	1.0471945
28	1.0346626 1	1.7920757 1	2.0693144 1	1.0471946
29	1.0589379 1	1.8341222 1	2.1178654 1	1.0471947
30	1.0829380 1	1.8756918 1	2.1658658 1	1.0471949
31	1.1066751 1	1.9168059 1	2.2133402 1	1.0471950
32	1.1301602 1	1.9574836 1	2.2603106 1	1.0471951
33	1.1534038 1	1.9977429 1	2.3067960 1	1.0471952
34	1.1764154 1	2.0376004 1	2.3528214 1	1.0471953
35	1.1992042 1	2.0770720 1	2.3983992 1	1.0471954
36	1.2217784 1	2.1161718 1	2.4435478 1	1.0471954
37	1.2441460 1	2.1549138 1	2.4882831 1	1.0471955
38	1.2663142 1	2.1933106 1	2.5326198 1	1.0471956
39	1.2882902 1	2.2313741 1	2.5765718 1	1.0471957
40	1.3100802 1	2.2691157 1	2.6201520 1	1.0471957
41	1.3316905 1	2.3065459 1	2.6633726 1	1.0471958
42	1.3531268 1	2.3436748 1	2.7062453 1	1.0471958
43	1.3743946 1	2.3805120 1	2.7487812 1	1.0471959
44	1.3954992 1	2.4170663 1	2.7909904 1	1.0471959
45	1.4164453 1	2.4533462 1	2.8328828 1	1.0471960
46	1.4372377 1	2.4893598 1	2.8744677 1	1.0471960
47	1.4578808 1	2.5251147 1	2.9157539 1	1.0471961
48	1.4783787 1	2.5606183 1	2.9567499 1	1.0471961
49	1.4987355 1	2.5958774 1	2.9974636 1	1.0471961
50	1.5189548 1	2.6308985 1	3.0379024 1	1.0471962

Table 61.

σ = 5 mhos/meter ϵ_2 = 80

f = 7 kilocycles

s	Re τ_s	Im τ_s	$\lvert\tau_s\rvert$	Arg τ_s
0	4.0610248 - 1	6.9980383 - 1	8.0910110 - 1	1.0449814
1	1.2896109	2.2325460	2.5782471	1.0469793
2	1.9132369	3.3130650	3.8258169	1.0470984
3	2.4462068	4.2363611	4.8918998	1.0471369
4	2.9258985	5.0673089	5.8513675	1.0471552
5	3.3688735	5.8346294	6.7373740	1.0471656
6	3.7843372	6.5542808	7.5683425	1.0471723
7	4.1780784	7.2362969	8.3558560	1.0471768
8	4.5540386	7.8875075	9.1078010	1.0471801
9	4.9150541	8.5128282	9.8298525	1.0471826
10	5.2632528	9.1159456	1.0526267 1	1.0471845
11	5.6002830	9.6997156	1.1200342 1	1.0471860
12	5.9274529	1.0266405 1	1.1854694 1	1.0471873
13	6.2458256	1.0817855 1	1.2491451 1	1.0471883
14	6.5562771	1.1355583 1	1.3112362 1	1.0471891
15	6.8595418	1.1880864 1	1.3718901 1	1.0471899
16	7.1562419	1.2394772 1	1.4312309 1	1.0471905
17	7.4469124	1.2898236 1	1.4893656 1	1.0471911
18	7.7320153	1.3392056 1	1.5463868 1	1.0471915
19	8.0119540	1.3876931 1	1.6023752 1	1.0471920
20	8.2870840	1.4353476 1	1.6574017 1	1.0471923
21	8.5577193	1.4822235 1	1.7115292 1	1.0471926
22	8.8241402	1.5283695 1	1.7648138 1	1.0471929
23	9.0865973	1.5738289 1	1.8173057 1	1.0471932
24	9.3453166	1.6186408 1	1.8690499 1	1.0471934
25	9.6005026	1.6628407 1	1.9200874 1	1.0471936
26	9.8523401	1.7064606 1	1.9704553 1	1.0471938
27	1.0101000 1	1.7495301 1	2.0201875 1	1.0471940
28	1.0346634 1	1.7920755 1	2.0693146 1	1.0471942
29	1.0589388 1	1.8341220 1	2.1178657 1	1.0471943
30	1.0829388 1	1.8756916 1	2.1658660 1	1.0471945
31	1.1066759 1	1.9168056 1	2.2133403 1	1.0471946
32	1.1301610 1	1.9574834 1	2.2603109 1	1.0471947
33	1.1534046 1	1.9977427 1	2.3067983 1	1.0471948
34	1.1764162 1	2.0376002 1	2.3528217 1	1.0471949
35	1.1992049 1	2.0770718 1	2.3983994 1	1.0471951
36	1.2217791 1	2.1161716 1	2.4435479 1	1.0471952
37	1.2441467 1	2.1549136 1	2.4882833 1	1.0471952
38	1.2663149 1	2.1933104 1	2.5326200 1	1.0471953
39	1.2882908 1	2.2313739 1	2.5765719 1	1.0471954
40	1.3100808 1	2.2691155 1	2.6201521 1	1.0471955
41	1.3316911 1	2.3065457 1	2.6633728 1	1.0471955
42	1.3531275 1	2.3436747 1	2.7062456 1	1.0471956
43	1.3743953 1	2.3805118 1	2.7487814 1	1.0471956
44	1.3954998 1	2.4170661 1	2.7909906 1	1.0471957
45	1.4164459 1	2.4533460 1	2.8328829 1	1.0471958
46	1.4372383 1	2.4893596 1	2.8744678 1	1.0471958
47	1.4578814 1	2.5251146 1	2.9157541 1	1.0471959
48	1.4783793 1	2.5606182 1	2.9567501 1	1.0471959
49	1.4987360 1	2.5958772 1	2.9974636 1	1.0471960
50	1.5189554 1	2.6308983 1	3.0379025 1	1.0471960

Table 62.

σ = 5 mhos/meter ϵ_2 = 80

f = 8 kilocycles

s	Re τ_s	Im τ_s	$\lvert\tau_s\rvert$	Arg τ_s
0	4.0631367 - 1	6.9974778 - 1	8.0915870 - 1	1.0447209
1	1.2896771	2.2325283	2.5782649	1.0469536
2	1.9132816	3.3130530	3.8258290	1.0470868
3	2.4462417	4.2363518	4.8919093	1.0471298
4	2.9259276	5.0673010	5.8513750	1.0471502
5	3.3688989	5.8346226	6.7373810	1.0471619
6	3.7843598	6.5542748	7.5683485	1.0471693
7	4.1780989	7.2362914	8.3558615	1.0471744
8	4.5540573	7.8875025	9.1078060	1.0471780
9	4.9150715	8.5128235	9.8298570	1.0471808
10	5.2632691	9.1159412	1.0526272 1	1.0471829
11	5.6002983	9.6997115	1.1200346 1	1.0471847
12	5.9274673	1.0266401 1	1.1854698 1	1.0471861
13	6.2458393	1.0817851 1	1.2491454 1	1.0471872
14	6.5562902	1.1355580 1	1.3112366 1	1.0471881
15	6.8595542	1.1880860 1	1.3718904 1	1.0471890
16	7.1562538	1.2394769 1	1.4312312 1	1.0471897
17	7.4469239	1.2898233 1	1.4893660 1	1.0471903
18	7.7320264	1.3392053 1	1.5463871 1	1.0471908
19	8.0119647	1.3876928 1	1.6023755 1	1.0471913
20	8.2870943	1.4353473 1	1.6574020 1	1.0471917
21	8.5577292	1.4822233 1	1.7115295 1	1.0471921
22	8.8241499	1.5283692 1	1.7648141 1	1.0471924
23	9.0866067	1.5738286 1	1.8173059 1	1.0471927
24	9.3453258	1.6186406 1	1.8690502 1	1.0471930
25	9.6005115	1.6628404 1	1.9200876 1	1.0471932
26	9.8523488	1.7064604 1	1.9704555 1	1.0471934
27	1.0101008 1	1.7495298 1	2.0201877 1	1.0471936
28	1.0346642 1	1.7920753 1	2.0693149 1	1.0471938
29	1.0589396 1	1.8341217 1	2.1178658 1	1.0471939
30	1.0829396 1	1.8756914 1	2.1658662 1	1.0471941
31	1.1066766 1	1.9168054 1	2.2133405 1	1.0471943
32	1.1301618 1	1.9574832 1	2.2603111 1	1.0471944
33	1.1534053 1	1.9977425 1	2.3067984 1	1.0471945
34	1.1764169 1	2.0376001 1	2.3528219 1	1.0471947
35	1.1992057 1	2.0770716 1	2.3983996 1	1.0471948
36	1.2217798 1	2.1161714 1	2.4435481 1	1.0471949
37	1.2441474 1	2.1549135 1	2.4882836 1	1.0471950
38	1.2663156 1	2.1933102 1	2.5326202 1	1.0471951
39	1.2882915 1	2.2313737 1	2.5765721 1	1.0471951
40	1.3100815 1	2.2691153 1	2.6201523 1	1.0471952
41	1.3316918 1	2.3065456 1	2.6633730 1	1.0471953
42	1.3531281 1	2.3436745 1	2.7062457 1	1.0471954
43	1.3743959 1	2.3805116 1	2.7487815 1	1.0471954
44	1.3955004 1	2.4170659 1	2.7909907 1	1.0471955
45	1.4164465 1	2.4533459 1	2.8328832 1	1.0471956
46	1.4372389 1	2.4893595 1	2.8744680 1	1.0471956
47	1.4578820 1	2.5251144 1	2.9157542 1	1.0471957
48	1.4783799 1	2.5606180 1	2.9567502 1	1.0471957
49	1.4987366 1	2.5958771 1	2.9974638 1	1.0471958
50	1.5189559 1	2.6308982 1	3.0379026 1	1.0471958

Table 63.

σ = 5 mhos/meter ϵ_2 = 80

f = 9 kilocycles

s	Re τ_s	Im τ_s	$\lvert\tau_s\rvert$	Arg τ_s
0	4.0652049 - 1	6.9969293 - 1	8.0921510 - 1	1.0444658
1	1.2897420	2.2325109	2.5782823	1.0469285
2	1.9133253	3.3130413	3.8258407	1.0470753
3	2.4462759	4.2363426	4.8919184	1.0471228
4	2.9259562	5.0672934	5.8513830	1.0471454
5	3.3689237	5.8346160	6.7373875	1.0471582
6	3.7843819	6.5542689	7.5683545	1.0471664
7	4.1781189	7.2362860	8.3558670	1.0471720
8	4.5540757	7.8874976	9.1078110	1.0471760
9	4.9150885	8.5128189	9.8298615	1.0471791
10	5.2632849	9.1159370	1.0526276 1	1.0471814
11	5.6003132	9.6997075	1.1200350 1	1.0471833
12	5.9274814	1.0266398 1	1.1854703 1	1.0471849
13	6.2458527	1.0817848 1	1.2491458 1	1.0471861
14	6.5563029	1.1355576 1	1.3112369 1	1.0471872
15	6.8595664	1.1880857 1	1.3718907 1	1.0471881
16	7.1562655	1.2394766 1	1.4312315 1	1.0471889
17	7.4469351	1.2898230 1	1.4893663 1	1.0471895
18	7.7320372	1.3392050 1	1.5463874 1	1.0471901
19	8.0119751	1.3876925 1	1.6023758 1	1.0471906
20	8.2871044	1.4353470 1	1.6574022 1	1.0471911
21	8.5577390	1.4822230 1	1.7115298 1	1.0471915
22	8.8241594	1.5283690 1	1.7648144 1	1.0471919
23	9.0866159	1.5738284 1	1.8173062 1	1.0471922
24	9.3453347	1.6186403 1	1.8690504 1	1.0471925
25	9.6005202	1.6628402 1	1.9200879 1	1.0471927
26	9.8523573	1.7064602 1	1.9704558 1	1.0471930
27	1.0101017 1	1.7495296 1	2.0201879 1	1.0471932
28	1.0346650 1	1.7920751 1	2.0693151 1	1.0471934
29	1.0589403 1	1.8341215 1	2.1178660 1	1.0471936
30	1.0829404 1	1.8756912 1	2.1658665 1	1.0471938
31	1.1066774 1	1.9168052 1	2.2133407 1	1.0471939
32	1.1301625 1	1.9574830 1	2.2603113 1	1.0471941
33	1.1534061 1	1.9977423 1	2.3067987 1	1.0471942
34	1.1764176 1	2.0375999 1	2.3528221 1	1.0471944
35	1.1992064 1	2.0770714 1	2.3983998 1	1.0471945
36	1.2217805 1	2.1161712 1	2.4435483 1	1.0471946
37	1.2441481 1	2.1549133 1	2.4882837 1	1.0471947
38	1.2663163 1	2.1933100 1	2.5326204 1	1.0471948
39	1.2882921 1	2.2313735 1	2.5765722 1	1.0471949
40	1.3100821 1	2.2691152 1	2.6201525 1	1.0471950
41	1.3316924 1	2.3065454 1	2.6633731 1	1.0471951
42	1.3531287 1	2.3436743 1	2.7062459 1	1.0471951
43	1.3743965 1	2.3805115 1	2.7487817 1	1.0471952
44	1.3955010 1	2.4170658 1	2.7909909 1	1.0471953
45	1.4164471 1	2.4533457 1	2.8328833 1	1.0471954
46	1.4372395 1	2.4893593 1	2.8744682 1	1.0471954
47	1.4578825 1	2.5251143 1	2.9157544 1	1.0471955
48	1.4783805 1	2.5606179 1	2.9567504 1	1.0471955
49	1.4987372 1	2.5958769 1	2.9974640 1	1.0471956
50	1.5189565 1	2.6308980 1	3.0379028 1	1.0471956

Table 64.

σ = 5 mhos/meter ϵ_2 = 80

s	Re τ_s	Im τ_s	$\lvert\tau_s\rvert$	Arg τ_s
		f = 10 kilocycles		
0	4.0672351 - 1	6.9963917 - 1	8.0927065 - 1	1.0442155
1	1.2898056	2.2324938	2.5782993	1.0469038
2	1.9133682	3.3130298	3.8258521	1.0470641
3	2.4463094	4.2363336	4.8919273	1.0471160
4	2.9259843	5.0672859	5.8513905	1.0471406
5	3.3689481	5.8346094	6.7373940	1.0471546
6	3.7844036	6.5542631	7.5683600	1.0471635
7	4.1781385	7.2362808	8.3558725	1.0471696
8	4.5540937	7.8874927	9.1078160	1.0471740
9	4.9151052	8.5128145	9.8298660	1.0471774
10	5.2633005	9.1159328	1.0526280 1	1.0471800
		f = 20 kilocycles		
0	4.0861172 - 1	6.9914164 - 1	8.0979170 - 1	1.0418909
1	1.2903979	2.2323354	2.5784585	1.0466741
2	1.9137673	3.3129230	3.8259593	1.0469598
3	2.4466216	4.2362501	4.8920111	1.0470522
4	2.9262452	5.0672160	5.8514605	1.0470960
5	3.3691747	5.8345487	6.7374550	1.0471209
6	3.7845053	6.5542090	7.5684140	1.0471368
7	4.1783213	7.2362318	8.3559215	1.0471477
8	4.5542614	7.8874478	9.1078610	1.0471556
9	4.9152605	8.5127728	9.8299080	1.0471616
10	5.2634456	9.1158939	1.0526319 1	1.0471662
		f = 30 kilocycles		
0	4.1034163 - 1	6.9869000 - 1	8.1027650 - 1	1.0397664
1	1.2909405	2.2321904	2.5786046	1.0464638
2	1.9141329	3.3128251	3.8260574	1.0468643
3	2.4469075	4.2361735	4.8920877	1.0469937
4	2.9264843	5.0671520	5.8515245	1.0470551
5	3.3693823	5.8344931	6.7375105	1.0470901
6	3.7847901	6.5541595	7.5684635	1.0471124
7	4.1784887	7.2361870	8.3559660	1.0471277
8	4.5544150	7.8874067	9.1079020	1.0471388
9	4.9154028	8.5127347	9.8299460	1.0471471
10	5.2635785	9.1158583	1.0526354 1	1.0471536
		f = 50 kilocycles		
0	4.1354310 - 1	6.9786462 - 1	8.1119230 - 1	1.0358480
1	1.2919447	2.2319223	2.5788754	1.0460747
2	1.9148096	3.3126441	3.8262393	1.0466875
3	2.4474367	4.2360319	4.8922298	1.0468856
4	2.9269267	5.0670335	5.8516430	1.0469795
5	3.3697666	5.8343902	6.7376135	1.0470331
6	3.7851322	6.5540679	7.5685555	1.0470672
7	4.1787985	7.2361041	8.3560495	1.0470906
8	4.5546992	7.8873305	9.1079780	1.0471076
9	4.9156662	8.5126642	9.8300165	1.0471203
10	5.2638244	9.1157924	1.0526420 1	1.0471302

Table 65.

σ = 5 mhos/meter ϵ_2 = 80

s	Re τ_s	Im τ_s	$\lvert\tau_s\rvert$	Arg τ_s
		f = 60 kilocycles		
0	4.1505833 - 1	6.9747872 - 1	8.1163415 - 1	1.0339995
1	1.2924200	2.2317957	2.5790040	1.0458906
2	1.9151299	3.3125585	3.8263255	1.0466038
3	2.4476872	4.2359648	4.8922971	1.0468344
4	2.9271361	5.0669775	5.8516995	1.0469437
5	3.3699485	5.8343415	6.7376625	1.0470061
6	3.7852941	6.5540246	7.5685990	1.0470458
7	4.1789451	7.2360648	8.3560885	1.0470731
8	4.5548338	7.8872946	9.1080145	1.0470928
9	4.9157908	8.5126308	9.8300500	1.0471076
10	5.2639408	9.1157612	1.0526452 1	1.0471191
		f = 70 kilocycles		
0	4.1653179 - 1	6.9710637 - 1	8.1206900 - 1	1.0322058
1	1.2928822	2.2316726	2.5791291	1.0457116
2	1.9154414	3.3124753	3.8264094	1.0465225
3	2.4479308	4.2358996	4.8923624	1.0467846
4	2.9273398	5.0669230	5.8517540	1.0469089
5	3.3701253	5.8342942	6.7377100	1.0469799
6	3.7854515	6.5539824	7.5686410	1.0470250
7	4.1790878	7.2360266	8.3561270	1.0470560
8	4.5549646	7.8872595	9.1080495	1.0470784
9	4.9159121	8.5125984	9.8300825	1.0470953
10	5.2640540	9.1157309	1.0526482 1	1.0471084
		f = 80 kilocycles		
0	4.1797044 - 1	6.9674558 - 1	8.1249845 - 1	1.0304560
1	1.2933335	2.2315524	2.5792514	1.0455369
2	1.9157456	3.3123941	3.8264914	1.0464430
3	2.4481687	4.2358361	4.8924265	1.0467360
4	2.9275386	5.0668698	5.8518075	1.0468750
5	3.3702980	5.8342480	6.7377565	1.0469542
6	3.7856053	6.5539413	7.5686825	1.0470047
7	4.1792270	7.2359893	8.3561640	1.0470394
8	4.5550923	7.8872253	9.1080835	1.0470644
9	4.9160304	8.5125667	9.8301145	1.0470833
10	5.2641646	9.1157014	1.0526512 1	1.0470979
		f = 90 kilocycles		
0	4.1937930 - 1	6.9639493 - 1	8.1292370 - 1	1.0287500
1	1.2937756	2.2314348	2.5793714	1.0453657
2	1.9160434	3.3123145	3.8265715	1.0463652
3	2.4484017	4.2357738	4.8924893	1.0466884
4	2.9277333	5.0668177	5.8518600	1.0468417
5	3.3704671	5.8342028	6.7378015	1.0469291
6	3.7857558	6.5539010	7.5687230	1.0469848
7	4.1793634	7.2359527	8.3562005	1.0470230
8	4.5552174	7.8871918	9.1081175	1.0470507
9	4.9161463	8.5125356	9.8301455	1.0470715
10	5.2642728	9.1156724	1.0526541 1	1.0470876

Table 66.

σ = 5 mhos/meter ϵ_2 = 80

s	Re τ_s	Im τ_s	$\lvert\tau_s\rvert$	Arg τ_s
		f = 100 kilocycles		
0	4.2076221 - 1	6.9605328 - 1	8.1334555 - 1	1.0270767
1	1.2942094	2.2313196	2.5794894	1.0451978
2	1.9163358	3.3122365	3.8266505	1.0462889
3	2.4486303	4.2357127	4.8925507	1.0466417
4	2.9279245	5.0667666	5.8519115	1.0468091
5	3.3706331	5.8341583	6.7378460	1.0469045
6	3.7859036	6.5538614	7.5687625	1.0469653
7	4.1794972	7.2359170	8.3562365	1.0470070
8	4.5553402	7.8871589	9.1081500	1.0470372
9	4.9162601	8.5125052	9.8301760	1.0470599
10	5.2643791	9.1156440	1.0526569 1	1.0470775
		f = 200 kilocycles		
0	4.3362200 - 1	6.9299709 - 1	8.1747965 - 1	1.0116796
1	1.2982457	2.2302515	2.5805937	1.0436372
2	1.9190555	3.3115123	3.8273866	1.0455791
3	2.4507572	4.2351451	4.8931243	1.0462073
4	2.9297026	5.0662916	5.8523900	1.0465054
5	3.3721774	5.8337456	6.7382615	1.0466754
6	3.7872783	6.5534938	7.5691320	1.0467838
7	4.1807423	7.2355839	8.3565710	1.0468581
8	4.5564825	7.8868533	9.1084570	1.0469118
9	4.9173185	8.5122220	9.8304600	1.0469523
10	5.2653674	9.1153795	1.0526835 1	1.0469836
		f = 300 kilocycles		
0	4.4539773 - 1	6.9038916 - 1	8.2159380 - 1	9.9784517 - 1
1	1.3019449	2.2292795	2.5816173	1.0422094
2	1.9215479	3.3108509	3.8280648	1.0449291
3	2.4527062	4.2346263	4.8936518	1.0458095
4	2.9313320	5.0658572	5.8528300	1.0462272
5	3.3735924	5.8333680	6.7386430	1.0464656
6	3.7885379	6.5531575	7.5694710	1.0466174
7	4.1818832	7.2352792	8.3568780	1.0467216
8	4.5575292	7.8865737	9.1087385	1.0467969
9	4.9182883	8.5119628	9.8307210	1.0468537
10	5.2662730	9.1151374	1.0527078 1	1.0468977
		f = 400 kilocycles		
0	4.5651663 - 1	6.8809325 - 1	8.2576010 - 1	9.8502277 - 1
1	1.3054419	2.2283672	2.5825954	1.0408620
2	1.9239037	3.3102280	3.8287092	1.0443153
3	2.4545482	4.2341371	4.8941520	1.0454337
4	2.9328718	5.0654474	5.8532465	1.0459645
5	3.3749297	5.8330116	6.7390040	1.0462673
6	3.7897282	6.5528401	7.5697920	1.0464603
7	4.1829614	7.2349915	8.3571685	1.0465927
8	4.5585182	7.8863098	9.1090050	1.0466885
9	4.9192047	8.5117181	9.8309675	1.0467605
10	5.2671288	9.1149088	1.0527308 1	1.0468164

Table 67.

σ = 5 mhos/meter ϵ_2 = 80

s	Re τ_s	Im τ_s	$\lvert\tau_s\rvert$	Arg τ_s
		f = 500 kilocycles		
0	4.6716794 - 1	6.8604507 - 1	8.3000225 - 1	9.7296483 - 1
1	1.3087966	2.2274982	2.5835435	1.0395716
2	1.9261632	3.3096328	3.8293308	1.0437270
3	2.4563149	4.2336690	4.8946334	1.0450735
4	2.9343485	5.0650551	5.8536470	1.0457126
5	3.3762121	5.8326705	6.7393510	1.0460773
6	3.7908697	6.5525361	7.5701005	1.0463097
7	4.1839951	7.2347161	8.3574475	1.0464692
8	4.5594667	7.8860568	9.1092605	1.0465844
9	4.9200835	8.5114839	9.8312045	1.0466712
10	5.2679493	9.1146899	1.0527529 1	1.0467385
		f = 600 kilocycles		
0	4.7745773 - 1	6.8420646 - 1	8.3432870 - 1	9.6153026 - 1
1	1.3120427	2.2266633	2.5844701	1.0383250
2	1.9283493	3.3090592	3.8299353	1.0431584
3	2.4580240	4.2332177	4.8951010	1.0447252
4	2.9357770	5.0646766	5.8540360	1.0454690
5	3.3774525	5.8323411	6.7396875	1.0458935
6	3.7919739	6.5522425	7.5703995	1.0461640
7	4.1849951	7.2344500	8.3577180	1.0463496
8	4.5603841	7.8858126	9.1095085	1.0464838
9	4.9209333	8.5112574	9.8314335	1.0465848
10	5.2687430	9.1144785	1.0527743 1	1.0466632
		f = 700 kilocycles		
0	4.8745343 - 1	6.8255191 - 1	8.3874190 - 1	9.5062797 - 1
1	1.3152021	2.2258566	2.5853809	1.0371137
2	1.9304762	3.3085031	3.8305262	1.0426055
3	2.4596867	4.2327795	4.8955573	1.0443866
4	2.9371666	5.0643089	5.8544150	1.0452321
5	3.3786592	5.8320212	6.7400155	1.0457148
6	3.7930479	6.5519574	7.5706905	1.0460224
7	4.1859679	7.2341915	8.3579815	1.0462334
8	4.5612764	7.8855752	9.1097495	1.0463860
9	4.9217602	8.5110374	9.8316570	1.0465008
10	5.2695151	9.1142729	1.0527952 1	1.0465899
		f = 800 kilocycles		
0	4.9720136 - 1	6.8106298 - 1	8.4324135 - 1	9.4019426 - 1
1	1.3182895	2.2250743	2.5862797	1.0359321
2	1.9325543	3.3079619	3.8311067	1.0420658
3	2.4613108	4.2323527	4.8960045	1.0440560
4	2.9385241	5.0639508	5.8547865	1.0450009
5	3.3798378	5.8317093	6.7403365	1.0455403
6	3.7940970	6.5516794	7.5709760	1.0458841
7	4.1869180	7.2339394	8.3582390	1.0461199
8	4.5621480	7.8853438	9.1099860	1.0462904
9	4.9225675	8.5108227	9.8318755	1.0464188
10	5.2702689	9.1140724	1.0528155 1	1.0465184

Table 68.

σ = 5 mhos/meter ϵ_2 = 80

s	Re τ_s	Im τ_s	$\lvert\tau_s\rvert$	Arg τ_s
		f = 900 kilocycles		
0	5.0673519 - 1	6.7972565 - 1	8.4782515 - 1	9.3018170 - 1
1	1.3213158	2.2243128	2.5871689	1.0347757
2	1.9345908	3.3074337	3.8316785	1.0415374
3	2.4629023	4.2319358	4.8964446	1.0437322
4	2.9398541	5.0636004	5.8551510	1.0447744
5	3.3809925	5.8314044	6.7406520	1.0453694
6	3.7951247	6.5514074	7.5712555	1.0457486
7	4.1878486	7.2336928	8.3584920	1.0460087
8	4.5630017	7.8851173	9.1102175	1.0461969
9	4.9233584	8.5106128	9.8320895	1.0463385
10	5.2710075	9.1138763	1.0528355 1	1.0464483
		f = 1000 kilocycles		
0	5.1608031 - 1	6.7852881 - 1	8.5249060 - 1	9.2055377 - 1
1	1.3242896	2.2235705	2.5880512	1.0336413
2	1.9365913	3.3069170	3.8322430	1.0410187
3	2.4644655	4.2315273	4.8968779	1.0434143
4	2.9411602	5.0632574	5.8555100	1.0445521
5	3.3821265	5.8311055	6.7409620	1.0452016
6	3.7961339	6.5511409	7.5715310	1.0456156
7	4.1887625	7.2334510	8.3587405	1.0458996
8	4.5638400	7.8848953	9.1104450	1.0461050
9	4.9241351	8.5104069	9.8323005	1.0462596
10	5.2717327	9.1136839	1.0528552 1	1.0463796
		f = 1100 kilocycles		
0	5.2525658 - 1	6.7746343 - 1	8.5723460 - 1	9.1128114 - 1
1	1.3272173	2.2228453	2.5889278	1.0325264
2	1.9385601	3.3064105	3.8328012	1.0405087
3	2.4660037	4.2311267	4.8973061	1.0431018
4	2.9424452	5.0629205	5.8558645	1.0443334
5	3.3832422	5.8308120	6.7412680	1.0450366
6	3.7971268	6.5508790	7.5718020	1.0454848
7	4.1896617	7.2332134	8.3589855	1.0457923
8	4.5646647	7.8846772	9.1106695	1.0460147
9	4.9248991	8.5102047	9.8325080	1.0461820
10	5.2724461	9.1134948	1.0528746 1	1.0463119
		f = 1200 kilocycles		
0	5.3427983 - 1	6.7652196 - 1	8.6205390 - 1	9.0233975 - 1
1	1.3301042	2.2221358	2.5898002	1.0314289
2	1.9405009	3.3059135	3.8333547	1.0400064
3	2.4675197	4.2307329	4.8977296	1.0427938
4	2.9437118	5.0625892	5.8562145	1.0441180
5	3.3843416	5.8305234	6.7415705	1.0448741
6	3.7981051	6.5506214	7.5720700	1.0453560
7	4.1905475	7.2329797	8.3592275	1.0456866
8	4.5654773	7.8844625	9.1108910	1.0459257
9	4.9256519	8.5100056	9.8327130	1.0461056
10	5.2731490	9.1133088	1.0528937 1	1.0462453

Table 69.

σ = 5 mhos/meter ϵ_2 = 80

s	Re τ_s	Im τ_s	$\lvert\tau_s\rvert$	Arg τ_s
		f = 1300 kilocycles		
0	5.4316290 - 1	6.7569802 - 1	8.6694505 - 1	8.9370946 - 1
1	1.3329547	2.2214408	2.5906693	1.0303470
2	1.9424166	3.3054247	3.8339033	1.0395109
3	2.4690158	4.2303455	4.8981489	1.0424901
4	2.9449617	5.0622633	5.8565610	1.0439056
5	3.3854263	5.8302391	6.7418690	1.0447138
6	3.7990705	6.5503678	7.5723350	1.0452289
7	4.1914216	7.2327497	8.3594665	1.0455823
8	4.5662790	7.8842511	9.1111095	1.0458379
9	4.9263946	8.5098096	9.8329155	1.0460303
10	5.2738423	9.1131256	1.0529125 1	1.0461796
		f = 1400 kilocycles		
0	5.5191651 - 1	6.7498602 - 1	8.7190480 - 1	8.8537280 - 1
1	1.3357725	2.2207595	2.5915364	1.0292794
2	1.9443096	3.3049441	3.8344486	1.0390218
3	2.4704939	4.2299639	4.8985646	1.0421903
4	2.9461963	5.0619420	5.8569045	1.0436958
5	3.3864980	5.8299589	6.7421650	1.0445554
6	3.8000239	6.5501178	7.5725970	1.0451034
7	4.1922848	7.2325227	8.3597030	1.0454794
8	4.5670709	7.8840426	9.1113260	1.0457512
9	4.9271281	8.5096161	9.8331155	1.0459559
10	5.2745271	9.1129449	1.0529312 1	1.0461147
		f = 1500 kilocycles		
0	5.6054957 - 1	6.7438123 - 1	8.7692980 - 1	8.7731492 - 1
1	1.3385606	2.2200909	2.5924020	1.0282249
2	1.9461819	3.3044709	3.8349905	1.0385384
3	2.4719558	4.2295878	4.8989774	1.0418939
4	2.9474170	5.0616252	5.8572450	1.0434884
5	3.3875575	5.8296826	6.7424585	1.0443990
6	3.8009665	6.5498711	7.5728565	1.0449794
7	4.1931384	7.2322988	8.3599375	1.0453776
8	4.5678536	7.8838370	9.1115405	1.0456656
9	4.9278531	8.5094253	9.8333135	1.0458823
10	5.2752041	9.1127665	1.0529496 1	1.0460506
		f = 1600 kilocycles		
0	5.6906974 - 1	6.7387930 - 1	8.8201685 - 1	8.6952241 - 1
1	1.3413218	2.2194347	2.5932672	1.0271823
2	1.9480354	3.3040045	3.8355297	1.0380603
3	2.4734024	4.2292169	4.8993872	1.0416008
4	2.9486250	5.0613124	5.8575825	1.0432834
5	3.3886059	5.8294097	6.7427490	1.0442442
6	3.8018993	6.5496273	7.5731140	1.0448567
7	4.1939827	7.2320776	8.3601695	1.0452770
8	4.5686279	7.8836337	9.1117530	1.0455809
9	4.9285704	8.5092367	9.8335100	1.0458096
10	5.2758738	9.1125903	1.0529680 1	1.0459872

Table 70.

σ = 5 mhos/meter ϵ_2 = 80

s	Re τ_s	Im τ_s	$\lceil \tau_s \rceil$	Arg τ_s
		f = 1700 kilocycles		
0	5.7748350 - 1	6.7347642 - 1	8.8716270 - 1	8.6198347 - 1
1	1.3440584	2.2187899	2.5941322	1.0261509
2	1.9498716	3.3035446	3.8360665	1.0375871
3	2.4748353	4.2288507	4.8997947	1.0413106
4	2.9498215	5.0610037	5.8579180	1.0430803
5	3.3896438	5.8291401	6.7430380	1.0440910
6	3.8028228	6.5493865	7.5733695	1.0447353
7	4.1948189	7.2318591	8.3604005	1.0451773
8	4.5693947	7.8834327	9.1119635	1.0454970
9	4.9292806	8.5090503	9.8337045	1.0457376
10	5.2765369	9.1124160	1.0529861 1	1.0459244
		f = 1800 kilocycles		
0	5.8579650 - 1	6.7316917 - 1	8.9236445 - 1	8.5468738 - 1
1	1.3467724	2.2181561	2.5949976	1.0251299
2	1.9516919	3.3030912	3.8366016	1.0371184
3	2.4762555	4.2284891	4.9002001	1.0410232
4	2.9510070	5.0606984	5.8582515	1.0428793
5	3.3906725	5.8288737	6.7433250	1.0439393
6	3.8037379	6.5491485	7.5736230	1.0446150
7	4.1956472	7.2316428	8.3606290	1.0450786
8	4.5701544	7.8832341	9.1121725	1.0454139
9	4.9299842	8.5088661	9.8338980	1.0456663
10	5.2771937	9.1122436	1.0530041 1	1.0458622
		f = 1900 kilocycles		
0	5.9401362 - 1	6.7295448 - 1	8.9761905 - 1	8.4762458 - 1
1	1.3494654	2.2175330	2.5958639	1.0241185
2	1.9534973	3.3026435	3.8371352	1.0366540
3	2.4776638	4.2281316	4.9006036	1.0407383
4	2.9521826	5.0603967	5.8585830	1.0426800
5	3.3916924	5.8286099	6.7436095	1.0437889
6	3.8046449	6.5489129	7.5738750	1.0444958
7	4.1964684	7.2314288	8.3608560	1.0449808
8	4.5709074	7.8830375	9.1123805	1.0453316
9	4.9306818	8.5086837	9.8340900	1.0455956
10	5.2778449	9.1120733	1.0530220 1	1.0458005
		f = 2000 kilocycles		
0	6.021392 - 1	6.728294 - 1	9.029237 - 1	8.407861 - 1
1	1.3521393	2.2169199	2.5967315	1.0231161
2	1.9552891	3.3022014	3.8376673	1.0361935
3	2.4790612	4.2277783	4.9010053	1.0404559
4	2.9533488	5.0600983	5.8589130	1.0424824
5	3.3927040	5.8283491	6.7438930	1.0436398
6	3.8055448	6.5486798	7.5741255	1.0443776
7	4.1972828	7.2312173	8.3610815	1.0448839
8	4.5716542	7.8828428	9.1125865	1.0452500
9	4.9313734	8.5085029	9.8342800	1.0455256
10	5.2784905	9.1119044	1.0530397 1	1.0457395

Table 71.

σ = 5 mhos/meter ϵ_2 = 80

s	Re τ_s	Im τ_s	$\lvert\tau_s\rvert$	Arg τ_s
		f = 2500 kilocycles		
0	6.4151331 - 1	6.7346464 - 1	9.3010425 - 1	8.0969137 - 1
1	1.3652670	2.2139983	2.6011041	1.0182225
2	1.9640731	3.3000685	3.8403171	1.0339423
3	2.4859062	4.2260670	4.9029963	1.0390750
4	2.9590389	5.0386496	5.8605430	1.0415163
5	3.3976559	5.8270821	6.7452910	1.0429109
6	3.8099481	6.5475466	7.5753595	1.0437999
7	4.2012678	7.2301874	8.3621925	1.0444099
8	4.5753077	7.8818956	9.1136010	1.0448511
9	4.9347566	8.5076239	9.8352165	1.0451831
10	5.2816485	9.1110821	1.0531269 1	1.0454408
		f = 3000 kilocycles		
0	6.790246 - 1	6.760197 - 1	9.581634 - 1	7.831806 - 1
1	1.378084	2.211295	2.605560	1.013491
2	1.972626	3.298050	3.842967	1.031761
3	2.4925620	4.2244367	4.9049700	1.0377369
4	2.9646064	5.0572653	5.8621520	1.0405802
5	3.4024638	5.8258688	6.7466665	1.0422046
6	3.8142217	6.5464599	7.5765710	1.0432403
7	4.2051342	7.2291991	8.3632615	1.0439506
8	4.5788515	7.8809862	9.1145940	1.0444648
9	4.9380376	8.5067790	9.8361325	1.0448515
10	5.2847105	9.1102917	1.0532122 1	1.0451517
		f = 3500 kilocycles		
0	7.14882 - 1	6.80299 - 1	9.86845 - 1	7.60616 - 1
1	1.39068	2.20879	2.61013	1.00889
2	1.981009	3.296134	3.845633	1.029635
3	2.4990750	4.2226765	4.9069402	1.0364322
4	2.9700296	5.0559358	5.8637500	1.0396677
5	3.4071610	5.8247011	6.7480285	1.0415163
6	3.8183947	6.5454130	7.5777680	1.0426949
7	4.2089082	7.2282458	8.3643555	1.0435035
8	4.5823098	7.8801083	9.1155730	1.0440883
9	4.9412387	8.5059633	9.8370345	1.0445264
10	5.2876972	9.1095282	1.0532960 1	1.0448700
		f = 4000 kilocycles		
0	7.49217 - 1	6.86150 - 1	1.01594	7.41489 - 1
1	1.40313	2.20649	2.61484	1.00439
2	1.989265	3.294311	3.848333	1.027552
3	2.505478	4.221380	4.908918	1.035154
4	2.9753558	5.0546553	5.8653460	1.0387741
5	3.4117706	5.8235737	6.7493845	1.0408424
6	3.8224880	6.5444006	7.5789575	1.0421611
7	4.2126082	7.2273232	8.3654210	1.0430658
8	4.5856991	7.8792581	9.1165425	1.0437201
9	4.9443751	8.5051725	9.8379270	1.0442124
10	5.2906250	9.1087876	1.0533789 1	1.0445945

Table 72.

σ = 5 mhos/meter ϵ_2 = 80

s	Re τ_s	Im τ_s	$\lvert\tau_s\rvert$	Arg τ_s
		f = 4500 kilocycles		
0	7.82115 - 1	6.93446 - 1	1.04526	7.25379 - 1
1	1.41549	2.20437	2.61970	9.99976 - 1
2	1.997427	3.292578	3.851076	1.025505
3	2.511797	4.219943	4.910910	1.033899
4	2.9806051	5.0534198	5.8669465	1.0378962
5	3.4163104	5.8224834	6.7507400	1.0401806
6	3.8265166	6.5434197	7.5801430	1.0416369
7	4.2162485	7.2264281	8.3664815	1.0426360
8	4.5890324	7.8784324	9.1175060	1.0433585
9	4.9474588	8.5044045	9.8388130	1.0439022
10	5.2934988	9.1080679	1.0534611 1	1.0443242
		f = 5000 kilocycles		
0	8.1363 - 1	7.0208 - 1	1.0747	7.1193 - 1
1	1.42778	2.20244	2.62475	9.95638 - 1
2	2.00552	3.29093	3.85387	1.02349
3	2.518050	4.218562	4.912925	1.032661
4	2.985794	5.052227	5.868557	1.037031
5	3.4207934	5.8214272	6.7520990	1.0395287
6	3.8304924	6.5424678	7.5813295	1.0411208
7	4.2198392	7.2255585	8.3675410	1.0422130
8	4.5923192	7.8776292	9.1184670	1.0430027
9	4.9504981	8.5036566	9.8396955	1.0435970
10	5.2963328	9.1073668	1.0535430 1	1.0440581
		f = 6000 kilocycles		
0	8.7264 - 1	7.2298 - 1	1.1332	6.9188 - 1
1	1.4523	2.1992	2.6355	9.8715 - 1
2	2.02159	3.28789	3.85967	1.01952
3	2.530419	4.215960	4.917046	1.03023
4	2.996036	5.049959	5.871825	1.035333
5	3.429631	5.819411	6.754844	1.038250
6	3.838322	6.540644	7.583716	1.040108
7	4.2269049	7.2238888	8.3696650	1.0413834
8	4.5987825	7.8760851	9.1203900	1.0423052
9	4.9564724	8.5022171	9.8414590	1.0429988
10	5.3019005	9.1060157	1.0537062 1	1.0435369
		f = 7000 kilocycles		
0	9.2637 - 1	7.4818 - 1	1.1908	6.7939 - 1
1	1.4770	2.1967	2.6471	9.7885 - 1
2	2.03760	3.28519	3.86578	1.01563
3	2.54269	4.21357	4.92132	1.02784
4	3.006164	5.047845	5.875182	1.033667
5	3.438351	5.817515	6.757643	1.036995
6	3.846036	6.538922	7.586138	1.039116
7	4.233858	7.222306	8.371813	1.040571
8	4.6051366	7.8746171	9.1223285	1.0416226
9	4.9623409	8.5008457	9.8432315	1.0424135
10	5.3073661	9.1047268	1.0538700 1	1.0430272

Table 73.

σ = 5 mhos/meter ϵ_2 = 80

s	Re τ_s	Im τ_s	$\lvert\tau_s\rvert$	Arg τ_s
		f = 8000 kilocycles		
0	9.748 - 1	7.771 - 1	1.247	6.730 - 1
1	1.5020	2.1952	2.6598	9.7072 - 1
2	2.0537	3.2828	3.8723	1.0118
3	2.55493	4.21139	4.92580	1.02549
4	3.01624	5.04588	5.87866	1.03202
5	3.447004	5.815736	6.760519	1.035760
6	3.853677	6.537295	7.588613	1.038140
7	4.240736	7.220804	8.373999	1.039772
8	4.611415	7.873221	9.124295	1.040951
9	4.968135	8.499538	9.845025	1.041838
10	5.312759	9.103495	1.054035 1	1.042526
		f = 9000 kilocycles		
0	1.018	8.092 - 1	1.300	6.717 - 1
1	1.528	2.195	2.674	9.627 - 1
2	2.070	3.2809	3.8792	1.0080
3	2.56721	4.20943	4.93050	1.02315
4	3.02630	5.04407	5.88227	1.03040
5	3.45563	5.81407	6.76349	1.03454
6	3.861278	6.535762	7.591157	1.037175
7	4.247568	7.219382	8.376235	1.038983
8	4.617646	7.871893	9.126300	1.040289
9	4.973879	8.498291	9.846849	1.041271
10	5.318101	9.102319	1.054203 1	1.042032
		f = 10000 kilocycles		
0	1.055	8.441 - 1	1.351	6.746 - 1
1	1.554	2.195	2.689	9.549 - 1
2	2.0863	3.2793	3.8867	1.0042
3	2.5796	4.2077	4.9355	1.0208
4	3.03640	5.04242	5.88606	1.02878
5	3.46426	5.81253	6.76658	1.03332
6	3.86887	6.53432	7.59378	1.03622
7	4.254379	7.218040	8.378535	1.038201
8	4.623849	7.870634	9.128355	1.039633
9	4.979592	8.497104	9.848712	1.040709
10	5.323409	9.101195	1.054374 1	1.041544

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