

Hafnium (Cont.)

15	1305.24	IV
12	1357.40	IV
40	1390.39	IV
50	1491.67	IV
35	1528.82	IV
15	1560.18	IV
25	1572.03	IV
100	1717.21	IV
20	1718.57	IV
	Air	
100	2054.46	IV
7	2014.06	IV
20	7751.29	IV
10	7267.58	IV
	Hf V	
	Ref. 410 — R.L.K.	
Intensity	Wavelength	
	Vacuum	
220	545.41	V
180	600.00	V
100	816.81	V
100	830.69	V
100	836.74	V
100	846.87	V
100	856.32	V
100	861.80	V
135	865.16	V
270	867.25	V
180	875.88	V
135	877.87	V
135	880.37	V
100	880.85	V
180	885.58	V
135	885.80	V
135	894.24	V
100	894.41	V
180	896.14	V
100	896.47	V
135	899.70	V
180	901.54	V
135	901.92	V
135	904.95	V
135	909.70	V
135	913.68	V
135	918.48	V
180	919.10	V
270	921.67	V
135	928.01	V
135	931.50	V
135	947.12	V
245	951.62	V
180	960.12	V
180	964.74	V
160	971.51	V
135	974.62	V
120	984.64	V
135	991.50	V
100	1078.42	V
100	1079.92	V
160	1092.76	V
135	1097.28	V
135	1137.49	V
160	1201.76	V
135	1208.88	V
135	1224.62	V
135	1227.98	V
135	1230.21	V
270	1232.03	V
200	1233.59	V
160	1237.42	V
100	1238.85	V
160	1239.53	V
160	1244.46	V
100	1259.25	V
440	1396.66	V
270	1400.09	V
160	1401.70	V
135	1405.77	V
370	1407.17	V
370	1408.38	V
270	1412.28	V
270	1413.51	V
160	1421.96	V
220	1422.53	V
370	1433.43	V
370	1437.27	V
500	1437.73	V
370	1445.40	V
270	1457.91	V
270	1719.32	V
550	1729.08	V
750	1731.83	V
750	1733.96	V
440	1741.74	V
1000	1749.11	V
1000	1750.19	V

500	1760.89	V
370	1765.62	V
270	1774.02	V
135	1792.39	V
	HELIUM (He)	
	Z = 2	
	He I and II	
	Ref. 16, 94, 173, 183, 317	
	W.C.M.	
Intensity	Wavelength	
	Vacuum	
15	231.454	II
20	232.584	II
30	234.347	II
50	237.331	II
100	243.027	II
300	256.317	II
1000	303.780	II
500	303.786	II
10	320.293	I
2	505.500	I
3	505.684	I
4	505.912	I
5	506.200	I
7	506.570	I
10	507.058	I
15	507.718	I
20	508.643	I
25	509.998	I
35	512.098	I
50	515.616	I
100	522.213	I
400	537.030	I
1000	584.334	I
50	591.412	I
5	958.70	II
6	972.11	II
8	992.36	II
15	1025.27	II
30	1084.94	II
50	1215.09	II
50	1215.17	II
120	1640.34	II
180	1640.47	II
	Air	
7	2385.40	II
9	2511.20	II
50	2577.6	I
1	2723.19	I
12	2733.30	I
2	2763.80	I
10	2818.2	I
4	2829.08	I
10	2945.11	I
40	3013.7	I
20	3187.74	I
3	3202.96	II
15	3203.10	II
1	3354.55	I
2	3447.59	I
1	3587.27	I
3	3613.64	I
2	3634.23	I
3	3705.00	I
1	3732.86	I
10	3819.607	I
1	3819.76	I
500	3888.65	I
20	3964.729	I
1	4009.27	I
50	4026.191	I
5	4026.36	I
12	4120.82	I
2	4120.99	I
3	4143.76	I
10	4387.929	I
3	4437.55	I
200	4471.479	I
25	4471.68	I
6	4685.4	II
30	4685.7	II
30	4713.146	I
4	4713.38	I
20	4921.931	I
100	5015.678	I
10	5047.74	I
5	5411.52	II
500	5875.62	I
100	5875.97	I
8	6560.10	II
100	6678.15	I
3	6867.48	I
200	7065.19	I
30	7065.71	I
50	7281.35	I
1	7816.15	I

2	8361.69	I
2	9063.27	I
2	9210.34	I
10	9463.61	I
4	9516.60	I
3	9526.17	I
1	9529.27	I
1	9603.42	I
3	9702.60	I
6	10027.73	I
2	10031.16	I
15	10123.6	II
1	10138.50	I
10	10311.23	I
2	10311.54	I
3	10667.65	I
300	10829.09	I
1000	10830.25	I
2000	10830.34	I
9	10913.05	I
3	10917.10	I
4	11626.4	II
30	11969.12	I
20	12527.52	I
50	12784.99	I
20	12790.57	I
7	12845.96	I
10	12968.45	I
2	12984.89	I
12	15083.64	I
200	17002.47	I
1	18555.55	I
6	18636.8	II
500	18685.34	I
200	18697.23	I
100	19089.38	I
20	19543.08	I
1000	20581.30	I
80	21120.07	I
10	21121.43	I
20	21132.03	I
3	30908.5	II
4	40478.90	I
	HOLMIUM (Ho)	
	Z = 67	
	Ho I and II	
	Ref. 1 — C.H.C.	
Intensity	Wavelength	
	Air	
170	2502.91	II
80	2508.53	II
110	2513.55	II
95	2518.73	II
170	2533.80	I
130	2536.86	II
80	2556.84	I
80	2567.73	II
80	2586.52	I
60	2591.05	II
95	2592.99	I
190	2605.86	II
110	2610.51	II
95	2613.99	II
60	2625.20	II
80	2640.09	I
80	2640.30	II
60	2649.68	II
80	2666.24	II
70	2689.03	II
210	2713.65	II
230	2733.95	II
270	2750.35	II
110	2759.35	II
110	2766.85	II
270	2769.89	II
110	2772.83	II
140	2777.10	II
140	2794.41	II
100	2799.99	II
100	2806.72	II
160	2809.99	II
220	2811.36	II
180	2812.00	II
190	2814.74	II
300	2824.20	II
140	2826.64	II
270	2831.69	II
210	2834.99	II
110	2835.85	II
110	2844.18	II
100	2844.68	II
270	2849.10	II
100	2861.23	II
20	2861.49	II
150	2862.72	II
210	2871.99	II
230	2874.06	II

160	2874.43	II
360	2880.26	II
460	2880.98	II
340	2894.99	II
160	2895.62	II
170	2900.84	II
570	2909.41	II
170	2915.82	II
300	2919.62	II
110	2925.35	II
160	2926.09	II
300	2928.30	II
220	2942.05	II
300	2944.49	II
250	2953.11	II
390	2973.00	II
410	2979.63	II
180	2981.46	II
140	2985.48	II
410	2987.64	II
250	2990.27	II
110	2995.86	II
320	3008.10	II
220	3014.60	II
270	3038.69	II
480	3049.38	II
410	3054.00	II
500	3057.45	II
230	3074.30	II
500	3082.34	II
910	3084.36	II
430	3086.54	II
200	3108.31	II
200	3109.91	II
760	3118.50	II
300	3130.99	II
200	3134.39	II
300	3144.36	II
200	3156.18	II
270	3156.97	II
200	3159.67	II
580	3166.62	II
390	3171.72	II
810	3173.78	II
390	3174.84	II
270	3176.97	II
810	3181.50	II
390	3183.84	II
270	3184.48	II
200	3186.37	I
390	3197.83	II
390	3201.76	II
200	3206.86	II
270	3210.41	II
200	3221.42	II
320	3233.34	II
200	3236.90	II
200	3237.40	II
200	3257.45	II
390	3278.15	II
270	3279.25	II
980	3281.97	II
390	3288.46	II
270	3290.96	II
200	3305.16	II
200	3319.87	II
230	3320.25	II
200	3331.93	II
630	3337.23	II
390	3338.86	II
980	3343.58	II
200	3344.47	II
360	3350.49	II
320	3352.10	II
320	3353.55	II
320	3354.58	II
320	3357.91	II
320	3364.27	II
290	3370.87	II
230	3374.16	II
290	3390.75	II
320	3394.60	II
8100	3398.98	II
810	3410.26	II
1200	3421.63	II
3200	3453.14	II
390	3410.65	II
1400	3414.90	II
5400	3416.46	II
2000	3425.34	II
2000	3428.13	II
630	3429.18	II
320	3432.10	II
390	3449.35	I
810	3455.70	II
16000	3456.00	II
1600	3461.97	II
360	3467.07	II
810	3473.91	II
5400	3474.26	II
6300	3484.84	II
490	3489.58	II
580	3493.09	II