

Table 6.3.3.4. Values of $(I/A^*)(dA^*/d\mu R)$ for spheres

μR	$\theta = 0^\circ$	$\theta = 5^\circ$	$\theta = 10^\circ$	$\theta = 15^\circ$	$\theta = 20^\circ$	$\theta = 25^\circ$	$\theta = 30^\circ$	$\theta = 35^\circ$	$\theta = 40^\circ$	$\theta = 45^\circ$	$\theta = 50^\circ$	$\theta = 55^\circ$	$\theta = 60^\circ$	$\theta = 65^\circ$	$\theta = 70^\circ$	$\theta = 75^\circ$	$\theta = 80^\circ$	$\theta = 85^\circ$	$\theta = 90^\circ$
0.0	1.5000	1.5000	1.5000	1.5000	1.5000	1.5000	1.5000	1.5000	1.5000	1.5000	1.5000	1.5000	1.5000	1.5000	1.5000	1.5000	1.5000	1.5000	1.5000
0.1	1.4845	1.4842	1.4829	1.4809	1.4782	1.4739	1.4690	1.4634	1.4569	1.4504	1.4439	1.4375	1.4309	1.4248	1.4191	1.4152	1.4117	1.4096	1.4089
0.2	1.4692	1.4682	1.4650	1.4611	1.4548	1.4472	1.4374	1.4268	1.4145	1.4019	1.3879	1.3748	1.3615	1.3491	1.3385	1.3292	1.3228	1.3180	1.3168
0.3	1.4527	1.4515	1.4476	1.4400	1.4309	1.4186	1.4044	1.3886	1.3708	1.3517	1.3327	1.3128	1.2947	1.2773	1.2624	1.2494	1.2397	1.2340	1.2321
0.4	1.4360	1.4341	1.4283	1.4190	1.4058	1.3898	1.3709	1.3492	1.3265	1.3018	1.2773	1.2531	1.2296	1.2089	1.1903	1.1748	1.1628	1.1560	1.1533
0.5	1.4186	1.4161	1.4090	1.3969	1.3803	1.3598	1.3360	1.3093	1.2812	1.2522	1.2231	1.1946	1.1678	1.1434	1.1218	1.1044	1.0910	1.0825	1.0797
0.6	1.4011	1.3980	1.3890	1.3742	1.3538	1.3289	1.3006	1.2693	1.2365	1.2033	1.1700	1.1382	1.1087	1.0816	1.0577	1.0383	1.0239	1.0147	1.0115
0.7	1.3830	1.3792	1.3683	1.3507	1.3264	1.2973	1.2643	1.2286	1.1918	1.1549	1.1184	1.0839	1.0516	1.0250	0.9978	0.9767	0.9615	0.9518	0.9484
0.8	1.3641	1.3600	1.3473	1.3262	1.2984	1.2650	1.2275	1.1879	1.1473	1.1071	1.0684	1.0314	0.9976	0.9674	0.9409	0.9195	0.9034	0.8931	0.8898
0.9	1.3451	1.3401	1.3253	1.3013	1.2696	1.2321	1.1908	1.1474	1.1038	1.0608	1.0198	0.9815	0.9465	0.9152	0.8880	0.8663	0.8495	0.8391	0.8359
1.0	1.3255	1.3198	1.3029	1.2758	1.2401	1.1987	1.1535	1.1070	1.0608	1.0157	0.9733	0.9340	0.8978	0.8661	0.8392	0.8167	0.8001	0.7897	0.7859
1.1	1.3058	1.2993	1.2800	1.2497	1.2103	1.1651	1.1165	1.0670	1.0185	0.9720	0.9286	0.8886	0.8522	0.8205	0.7931	0.7709	0.7542	0.7437	0.7400
1.2	1.2851	1.2780	1.2566	1.2228	1.1799	1.1312	1.0796	1.0278	0.9777	0.9299	0.8858	0.8455	0.8093	0.7776	0.7506	0.7285	0.7120	0.7017	0.6981
1.3	1.2645	1.2563	1.2324	1.1961	1.1494	1.0967	1.0430	0.9892	0.9377	0.8895	0.8451	0.8048	0.7691	0.7378	0.7113	0.6895	0.6733	0.6631	0.6596
1.4	1.2449	1.2349	1.2090	1.1684	1.1180	1.0628	1.0068	0.9517	0.8990	0.8504	0.8064	0.7666	0.7315	0.7009	0.6749	0.6539	0.6377	0.6278	0.6243
1.5	1.2231	1.2133	1.1845	1.1398	1.0867	1.0295	0.9711	0.9145	0.8615	0.8133	0.7696	0.7308	0.6964	0.6665	0.6414	0.6209	0.6055	0.5957	0.5922
1.6	1.2015	1.1908	1.1585	1.1118	1.0555	0.9957	0.9358	0.8782	0.8261	0.7778	0.7350	0.6970	0.6638	0.6349	0.6105	0.5907	0.5758	0.5663	0.5628
1.7	1.1806	1.1681	1.1339	1.0836	1.0244	0.9621	0.9005	0.8435	0.7912	0.7444	0.7027	0.6659	0.6334	0.6057	0.5822	0.5632	0.5484	0.5394	0.5361
1.8	1.1586	1.1456	1.1087	1.0558	0.9939	0.9294	0.8669	0.8101	0.7579	0.7121	0.6711	0.6359	0.6053	0.5787	0.5561	0.5376	0.5236	0.5148	0.5117
1.9	1.1370	1.1226	1.0835	1.0275	0.9625	0.8964	0.8341	0.7774	0.7262	0.6817	0.6420	0.6078	0.5791	0.5535	0.5321	0.5144	0.5010	0.4924	0.4892
2.0	1.1152	1.0996	1.0584	0.9982	0.9318	0.8646	0.8019	0.7457	0.6962	0.6527	0.6160	0.5830	0.5550	0.5305	0.5098	0.4927	0.4799	0.4717	0.4687
2.1	1.0932	1.0772	1.0327	0.9703	0.9014	0.8340	0.7712	0.7157	0.6678	0.6259	0.5899	0.5588	0.5322	0.5088	0.4886	0.4726	0.4603	0.4523	0.4494
2.2	1.0719	1.0543	1.0074	0.9427	0.8719	0.8039	0.7421	0.6874	0.6402	0.6003	0.5658	0.5353	0.5098	0.4884	0.4699	0.4548	0.4426	0.4347	0.4311
2.3	1.0498	1.0316	0.9822	0.9150	0.8434	0.7744	0.7133	0.6605	0.6147	0.5758	0.5433	0.5141	0.4896	0.4692	0.4518	0.4363	0.4252	0.4175	0.4149
2.4	1.0275	1.0118	0.9583	0.8889	0.8147	0.7482	0.6870	0.6340	0.5918	0.5507	0.5212	0.4937	0.4699	0.4500	0.4328	0.4187	0.4076	0.4003	0.3986
2.5	1.0108	0.9691	0.9297	0.8562	0.7904	0.7074	0.6554	0.6194	0.5618	0.5289	0.4980	0.4776	0.4554	0.4315	0.4142	0.4028	0.3921	0.3883	0.3783

Table 6.3.3.5. Coefficients for interpolation of A^* and \bar{T}

θ_j	0°	15°	30°	45°	60°	75°	90°	Units
K_1 (sphere)	3/2	3/2	3/2	3/2	3/2	3/2	3/2	
K_2	-7.5234	-9.4320	-15.109	-24.3812	-35.219	-44.042	-47.745	10^{-2}
K_3	-7.0935	-10.737	-18.027	-11.088	14.265	40.021	61.084	10^{-3}
K_4	-2.3096	-2.1332	-1.4693	7.4205	24.832	44.308	37.394	10^{-3}
K_5	1.8323	1.1711	4.6784	3.0970	-10.284	-27.987	-25.879	10^{-3}
K_6	-5.1259	-1.2652	-14.491	-16.740	21.910	77.007	71.458	10^{-4}
K_7	6.0265	0.7932	16.489	21.774	-22.391	-85.570	-78.812	10^{-5}
K_1 (cylinder)	$16/3\pi$	$16/3\pi$	$16/3\pi$	$16/3\pi$	$16/3\pi$	$16/3\pi$	$16/3\pi$	
K_2	-5.7832	-8.1900	-15.651	-27.048	-40.317	-51.497	-55.837	10^{-2}
K_3	-14.737	-19.551	-22.883	-27.345	-8.807	26.637	41.420	10^{-3}
K_4	5.2399	1.2934	-12.301	6.844	40.689	61.371	68.963	10^{-3}
K_5	-4.0958	-2.8349	9.6249	7.503	-11.295	-29.397	-36.556	10^{-3}
K_6	13.178	12.731	-19.881	-30.211	9.4468	60.356	80.965	10^{-4}
K_7	-14.500	-14.846	14.414	34.222	3.1492	-49.206	-70.573	10^{-5}
$(C^{-1})_{0j}$	3	0	0	0	0	0	0	All values multiplied by 3 to eliminate fractions
$(C^{-1})_{1j}$	-73	$48+24\sqrt{3}$	-24	12	-8	$48-24\sqrt{3}$	-3	
$(C^{-1})_{2j}$	518	$-496-200\sqrt{3}$	488	-268	184	$-496+200\sqrt{3}$	70	
$(C^{-1})_{3j}$	-1600	$1920+560\sqrt{3}$	-2192	1536	-1136	$1920-560\sqrt{3}$	-448	
$(C^{-1})_{4j}$	2432	$-3520-640\sqrt{3}$	4032	-3328	2752	$-3520+640\sqrt{3}$	1152	
$(C^{-1})_{5j}$	-1792	$3072+256\sqrt{3}$	-3328	3072	-2816	$3072-256\sqrt{3}$	-1280	
$(C^{-1})_{6j}$	512	-1024	1024	-1024	1024	-1024	512	