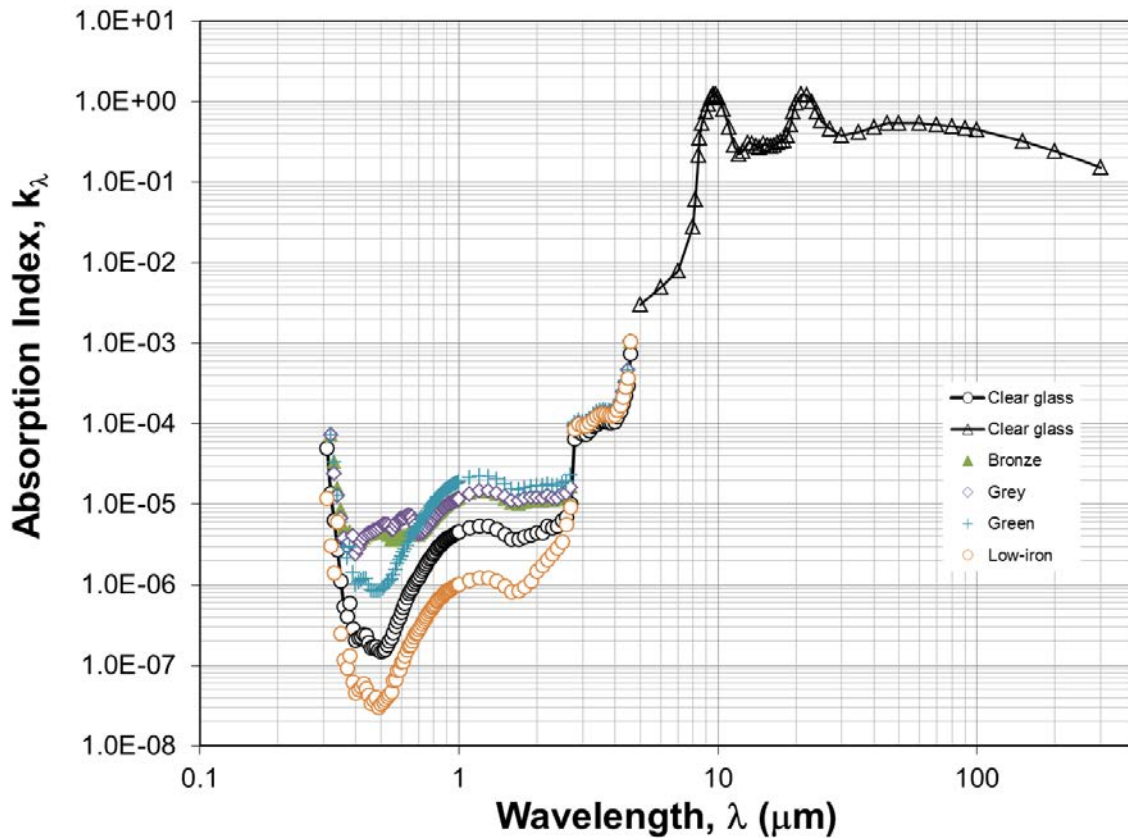
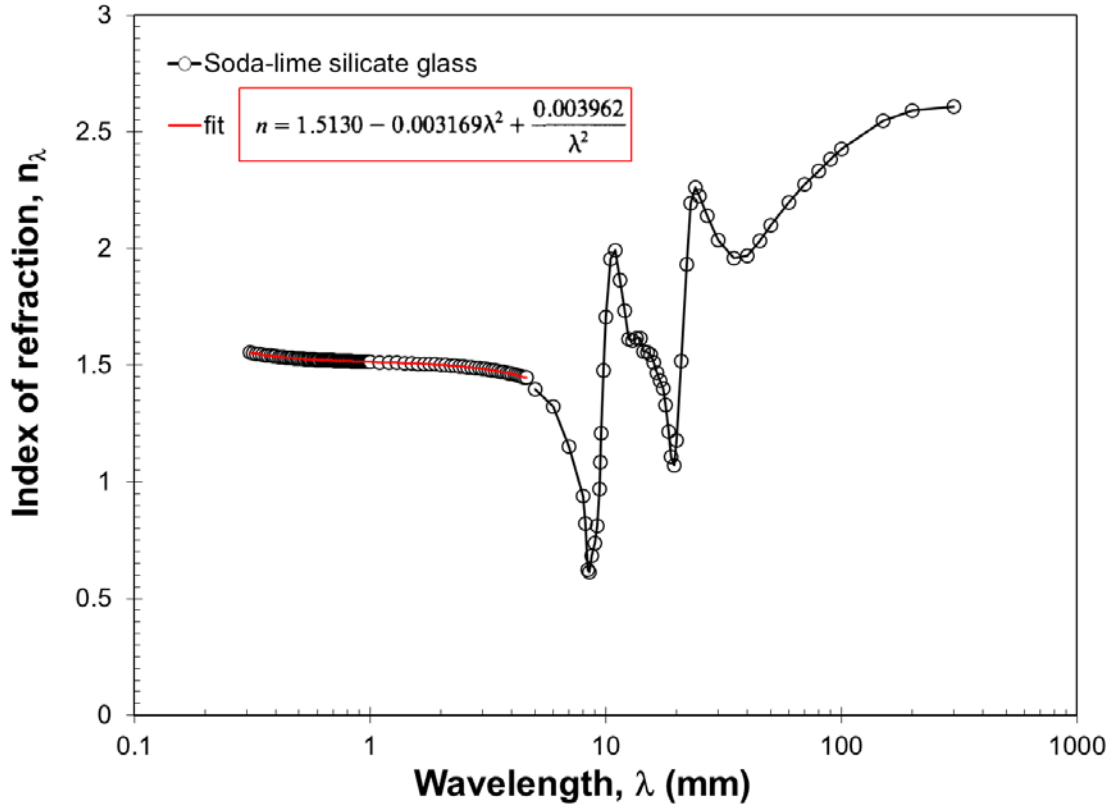


Refraction and absorption index of Soda Lime Silicate Glasses

Source: M. Rubin, "Optical Constants and Bulk Optical Properties of Soda Lime Silica Glasses for Windows", Solar Energy Materials, Vol. 12, pp. 275-288, 1985.



wavelength (microns)	Clear		Bronze	Grey	Green	Low-iron
	n	k	k	k	k	k
0.31	1.554	4.996E-05				1.191E-05
0.32	1.551	1.375E-05	7.310E-05	7.310E-05	7.310E-05	3.062E-06
0.33	1.549	6.281E-06	3.341E-05	2.433E-05	3.341E-05	1.399E-06
0.34	1.547	2.713E-06	1.583E-05	1.291E-05	1.291E-05	6.061E-06
0.35	1.545	1.118E-06	8.617E-06	6.584E-06	5.955E-06	2.458E-07
0.36	1.543	5.419E-07	5.081E-06	3.790E-06	2.999E-06	1.164E-07
0.37	1.542	4.061E-07	4.087E-06	2.974E-06	2.158E-06	9.300E-08
0.38	1.54	5.936E-07	4.514E-06	3.379E-06	2.944E-06	1.309E-07
0.39	1.539	2.828E-07	3.321E-06	4.036E-06	1.419E-06	6.261E-08
0.4	1.537	2.047E-07	3.076E-06	2.400E-06	1.025E-06	4.570E-08
0.41	1.536	2.182E-07	3.330E-06	2.863E-06	1.096E-06	5.013E-08
0.42	1.535	2.279E-07	3.586E-06	3.315E-06	1.147E-06	5.449E-08
0.43	1.534	2.397E-07	3.877E-06	3.793E-06	1.205E-06	5.878E-08
0.44	1.533	2.342E-07	4.107E-06	4.160E-06	1.181E-06	5.095E-08
0.45	1.532	1.925E-07	4.230E-06	4.325E-06	9.902E-07	4.252E-08
0.46	1.531	1.669E-07	4.354E-06	4.484E-06	8.684E-07	3.351E-08
0.47	1.53	1.700E-07	4.496E-06	4.607E-06	8.484E-07	3.675E-08
0.48	1.529	1.683E-07	4.606E-06	4.781E-06	8.408E-07	3.995E-08
0.49	1.529	1.554E-07	4.697E-06	5.051E-06	8.445E-07	2.972E-08
0.5	1.528	1.492E-07	4.723E-06	5.294E-06	8.659E-07	3.257E-08
0.51	1.527	1.499E-07	4.686E-06	5.568E-06	9.096E-07	3.538E-08
0.52	1.527	1.582E-07	4.569E-06	5.685E-06	9.657E-07	3.816E-08
0.53	1.526	1.769E-07	4.339E-06	5.588E-06	1.039E-06	4.091E-08
0.54	1.526	1.988E-07	4.095E-06	5.414E-06	1.118E-06	4.362E-08
0.55	1.525	2.200E-07	3.725E-06	4.913E-06	1.169E-06	4.632E-08
0.56	1.525	2.529E-07	3.564E-06	4.842E-06	1.297E-06	6.429E-08
0.57	1.524	3.051E-07	3.750E-06	5.519E-06	1.556E-06	6.721E-08
0.58	1.524	3.563E-07	3.880E-06	6.061E-06	1.805E-06	8.597E-08
0.59	1.523	4.003E-07	3.922E-06	6.414E-06	2.027E-06	8.913E-08
0.6	1.523	4.548E-07	3.953E-06	6.651E-06	2.264E-06	1.087E-07
0.61	1.522	5.217E-07	3.929E-06	6.654E-06	2.508E-06	1.121E-07
0.62	1.522	5.972E-07	3.978E-06	6.745E-06	2.781E-06	1.325E-07
0.63	1.522	6.913E-07	4.169E-06	7.073E-06	3.073E-06	1.534E-07
0.64	1.521	7.754E-07	4.314E-06	7.210E-06	3.426E-06	1.749E-07
0.65	1.521	8.371E-07	4.420E-06	7.189E-06	3.942E-06	1.790E-07
0.66	1.521	9.108E-07	4.451E-06	6.883E-06	4.334E-06	2.013E-07
0.67	1.52	1.009E-06	4.354E-06	6.148E-06	4.472E-06	2.242E-07
0.68	1.52	1.097E-06	4.276E-06	5.460E-06	4.686E-06	2.476E-07
0.69	1.52	1.159E-06	4.194E-06	4.720E-06	5.008E-06	2.526E-07
0.7	1.52	1.234E-06	4.186E-06	4.210E-06	5.363E-06	2.769E-07
0.71	1.519	1.349E-06	4.401E-06	4.297E-06	5.805E-06	3.017E-07
0.72	1.519	1.466E-06	4.628E-06	4.412E-06	6.260E-06	3.271E-07
0.73	1.519	1.585E-06	4.870E-06	4.556E-06	6.730E-06	3.531E-07

		Clear	Bronze	Grey	Green	Low-iron
wavelength (microns)	n	k	k	k	k	k
0.74	1.519	1.706E-06	5.125E-06	4.730E-06	7.213E-06	3.796E-07
0.75	1.518	1.830E-06	5.395E-06	4.937E-06	7.711E-06	4.067E-07
0.76	1.518	1.956E-06	5.715E-06	5.250E-06	8.245E-06	4.344E-07
0.77	1.518	2.085E-06	6.036E-06	5.567E-06	8.785E-06	4.627E-07
0.78	1.518	2.214E-06	6.355E-06	5.885E-06	9.327E-06	4.916E-07
0.79	1.517	2.345E-06	6.673E-06	6.207E-06	9.871E-06	5.210E-07
0.8	1.517	2.477E-06	6.988E-06	6.530E-06	1.042E-05	5.510E-07
0.81	1.517	2.617E-06	7.290E-06	6.872E-06	1.097E-05	5.816E-07
0.82	1.517	2.755E-06	7.593E-06	7.208E-06	1.153E-05	6.128E-07
0.83	1.517	2.890E-06	7.898E-06	7.536E-06	1.207E-05	6.446E-07
0.84	1.516	3.022E-06	8.202E-06	7.855E-06	1.260E-05	6.770E-07
0.85	1.516	3.150E-06	8.507E-06	8.165E-06	1.312E-05	7.099E-07
0.86	1.516	3.274E-06	8.837E-06	8.452E-06	1.360E-05	7.193E-07
0.87	1.516	3.394E-06	9.155E-06	8.733E-06	1.408E-05	7.513E-07
0.88	1.516	3.510E-06	9.459E-06	9.007E-06	1.455E-05	7.875E-07
0.89	1.515	3.621E-06	9.749E-06	9.273E-06	1.500E-05	7.975E-07
0.9	1.515	3.727E-06	1.002E-05	9.531E-06	1.545E-05	8.328E-07
0.91	1.515	3.817E-06	1.025E-05	9.766E-06	1.587E-05	8.430E-07
0.92	1.515	3.906E-06	1.047E-05	9.998E-06	1.627E-05	8.792E-07
0.93	1.515	3.995E-06	1.069E-05	1.023E-05	1.667E-05	8.897E-07
0.94	1.515	4.083E-06	1.090E-05	1.045E-05	1.705E-05	9.002E-07
0.95	1.515	4.170E-06	1.111E-05	1.066E-05	1.741E-05	9.376E-07
0.96	1.514	4.261E-06	1.132E-05	1.087E-05	1.774E-05	9.484E-07
0.97	1.514	4.349E-06	1.152E-05	1.107E-05	1.806E-05	9.592E-07
0.98	1.514	4.433E-06	1.172E-05	1.127E-05	1.837E-05	9.977E-07
0.99	1.514	4.514E-06	1.191E-05	1.147E-05	1.867E-05	1.009E-06
1	1.514	4.591E-06	1.210E-05	1.166E-05	1.897E-05	1.020E-06
1.1	1.512	5.111E-06	1.356E-05	1.346E-05	2.119E-05	1.132E-06
1.2	1.511	5.374E-06	1.454E-05	1.465E-05	2.250E-05	1.210E-06
1.3	1.51	5.353E-06	1.430E-05	1.469E-05	2.215E-05	1.211E-06
1.4	1.509	4.939E-06	1.335E-05	1.374E-05	2.049E-05	1.118E-06
1.5	1.508	4.234E-06	1.161E-05	1.239E-05	1.762E-05	9.585E-07
1.6	1.506	3.675E-06	1.026E-05	1.123E-05	1.560E-05	8.129E-07
1.7	1.505	3.656E-06	1.009E-05	1.122E-05	1.518E-05	8.301E-07
1.8	1.504	3.920E-06	1.058E-05	1.183E-05	1.581E-05	9.432E-07
1.9	1.503	4.190E-06	1.098E-05	1.217E-05	1.656E-05	1.117E-06
2	1.501	4.423E-06	1.117E-05	1.227E-05	1.706E-05	1.471E-06
2.1	1.5	4.476E-06	1.118E-05	1.196E-05	1.683E-05	1.739E-06
2.2	1.498	5.373E-06	1.196E-05	1.270E-05	1.757E-05	2.027E-06
2.3	1.497	5.082E-06	1.137E-05	1.198E-05	1.686E-05	2.401E-06
2.4	1.495	5.372E-06	1.150E-05	1.205E-05	1.693E-05	2.868E-06
2.5	1.494	6.324E-06	1.266E-05	1.324E-05	1.838E-05	3.441E-06
2.6	1.492	6.883E-06	1.319E-05	1.380E-05	1.924E-05	5.643E-06

		Clear	Bronze	Grey	Green	Low-iron
wavelength (microns)	n	k	k	k	k	k
2.7	1.49	1.020E-05	1.657E-05	1.629E-05	2.313E-05	9.156E-06
2.8	1.489	6.495E-05	9.122E-05	9.406E-05	1.027E-04	8.560E-05
2.9	1.487	7.931E-05	1.008E-04	1.040E-04	1.120E-04	9.745E-05
3	1.485	7.432E-05	9.488E-05	9.781E-05	1.067E-04	9.318E-05
3.1	1.483	7.424E-05	9.662E-05	9.928E-05	1.072E-04	9.489E-05
3.2	1.481	8.187E-05	1.080E-04	1.077E-04	1.164E-04	1.025E-04
3.3	1.479	9.341E-05	1.190E-04	1.186E-04	1.294E-04	1.128E-04
3.4	1.477	9.958E-05	1.286E-04	1.299E-04	1.388E-04	1.250E-04
3.5	1.474	1.065E-04	1.351E-04	1.355E-04	1.473E-04	1.299E-04
3.6	1.472	1.073E-04	1.345E-04	1.385E-04	1.500E-04	1.333E-04
3.7	1.47	1.049E-04	1.366E-04	1.375E-04	1.477E-04	1.319E-04
3.8	1.468	1.029E-04	1.347E-04	1.368E-04	1.459E-04	1.282E-04
3.9	1.465	1.033E-04	1.341E-04	1.357E-04	1.436E-04	1.242E-04
4	1.463	1.060E-04	1.384E-04	1.393E-04	1.474E-04	1.267E-04
4.1	1.46	1.222E-04	1.579E-04	1.583E-04	1.694E-04	1.460E-04
4.2	1.457	1.435E-04	1.868E-04	1.868E-04	2.003E-04	1.691E-04
4.3	1.455	1.781E-04	2.467E-04	2.467E-04	2.590E-04	2.124E-04
4.4	1.452	2.247E-04	3.296E-04	3.296E-04	3.394E-04	2.810E-04
4.5	1.449	2.978E-04	4.623E-04	4.623E-04	4.669E-04	3.657E-04
4.6	1.446	7.427E-04	1.054E-03	1.054E-03	1.054E-03	1.054E-03