

Cooper (40.36° N, 95.64° E), Control Point Hazard

SA (g)	AFE 0.5 Hz	AFE 1 Hz	AFE 2.5 Hz	AFE 5 Hz	AFE 10 Hz	AFE 25 Hz	AFE 100 Hz
0.001000	4.802950e-03	6.886300e-03	9.309107e-03	9.738432e-03	9.805338e-03	9.644364e-03	9.022024e-03
0.001122	4.738692e-03	6.872460e-03	9.308725e-03	9.738432e-03	9.805337e-03	9.644364e-03	9.022024e-03
0.001259	4.606004e-03	6.781673e-03	9.305515e-03	9.738432e-03	9.805320e-03	9.644364e-03	9.022024e-03
0.001413	4.452475e-03	6.644265e-03	9.290735e-03	9.738432e-03	9.805163e-03	9.644364e-03	9.022024e-03
0.001585	4.265116e-03	6.447696e-03	9.253301e-03	9.738432e-03	9.804047e-03	9.644349e-03	9.022020e-03
0.001778	4.071674e-03	6.212494e-03	9.191935e-03	9.738404e-03	9.798814e-03	9.643888e-03	9.021856e-03
0.001995	3.881771e-03	5.949318e-03	9.109728e-03	9.737767e-03	9.782825e-03	9.637930e-03	9.018954e-03
0.002239	3.695091e-03	5.678755e-03	9.005252e-03	9.732294e-03	9.748277e-03	9.605928e-03	8.997400e-03
0.002512	3.510964e-03	5.409681e-03	8.876183e-03	9.712808e-03	9.689420e-03	9.526336e-03	8.920432e-03
0.002818	3.328630e-03	5.143580e-03	8.721968e-03	9.675710e-03	9.604533e-03	9.409519e-03	8.763029e-03
0.003162	3.147371e-03	4.881067e-03	8.542926e-03	9.618784e-03	9.495635e-03	9.270416e-03	8.542321e-03
0.003548	2.966465e-03	4.622537e-03	8.339303e-03	9.535481e-03	9.364478e-03	9.110020e-03	8.287157e-03
0.003981	2.785207e-03	4.367937e-03	8.111485e-03	9.423708e-03	9.210935e-03	8.926869e-03	8.007883e-03
0.004467	2.603186e-03	4.117263e-03	7.860621e-03	9.285504e-03	9.034191e-03	8.720588e-03	7.706365e-03
0.005012	2.419991e-03	3.869901e-03	7.588796e-03	9.122717e-03	8.833529e-03	8.491046e-03	7.384556e-03
0.005623	2.235803e-03	3.625590e-03	7.298662e-03	8.935848e-03	8.608550e-03	8.238321e-03	7.044597e-03
0.006310	2.050890e-03	3.383415e-03	6.992924e-03	8.724745e-03	8.359307e-03	7.963099e-03	6.688569e-03
0.007079	1.866272e-03	3.143152e-03	6.674021e-03	8.489279e-03	8.086342e-03	7.666713e-03	6.318759e-03
0.007943	1.683555e-03	2.904091e-03	6.344070e-03	8.229616e-03	7.790646e-03	7.350789e-03	5.937680e-03
0.008913	1.506840e-03	2.666413e-03	6.004959e-03	7.946322e-03	7.473566e-03	7.017171e-03	5.547909e-03
0.010000	1.337907e-03	2.430271e-03	5.658440e-03	7.640418e-03	7.136772e-03	6.667923e-03	5.152132e-03
0.011220	1.177764e-03	2.196650e-03	5.306241e-03	7.313308e-03	6.782252e-03	6.305381e-03	4.753304e-03
0.012589	1.027313e-03	1.966915e-03	4.950153e-03	6.966705e-03	6.412320e-03	5.932187e-03	4.354807e-03
0.014125	8.865324e-04	1.743202e-03	4.592095e-03	6.602591e-03	6.029619e-03	5.551283e-03	3.960485e-03
0.015849	7.564481e-04	1.529052e-03	4.234164e-03	6.223188e-03	5.637143e-03	5.165877e-03	3.574549e-03
0.017783	6.366598e-04	1.325514e-03	3.878682e-03	5.830980e-03	5.238241e-03	4.779414e-03	3.201348e-03
0.019953	5.279519e-04	1.136111e-03	3.528210e-03	5.428812e-03	4.836605e-03	4.395639e-03	2.845097e-03
0.022387	4.313330e-04	9.618653e-04	3.185464e-03	5.019890e-03	4.436207e-03	4.018341e-03	2.509310e-03
0.025119	3.475457e-04	8.046542e-04	2.853362e-03	4.607854e-03	4.041191e-03	3.651239e-03	2.194447e-03
0.028184	2.757943e-04	6.643778e-04	2.535044e-03	4.196734e-03	3.655696e-03	3.297141e-03	1.895786e-03
0.031623	2.157204e-04	5.414791e-04	2.233660e-03	3.790985e-03	3.283660e-03	2.954319e-03	1.611821e-03
0.035481	1.663039e-04	4.352390e-04	1.951643e-03	3.395177e-03	2.928523e-03	2.614457e-03	1.351999e-03
0.039811	1.264496e-04	3.452753e-04	1.690500e-03	3.013926e-03	2.592907e-03	2.280924e-03	1.124943e-03
0.044668	9.480792e-05	2.700322e-04	1.451437e-03	2.651570e-03	2.278595e-03	1.970171e-03	9.313388e-04
0.050119	7.014825e-05	2.084346e-04	1.235359e-03	2.311426e-03	1.986563e-03	1.690181e-03	7.683262e-04
0.056234	5.122294e-05	1.587612e-04	1.042487e-03	1.995247e-03	1.717494e-03	1.441416e-03	6.322700e-04
0.063096	3.695807e-05	1.195364e-04	8.722963e-04	1.704947e-03	1.472795e-03	1.222579e-03	5.194919e-04
0.070795	2.637199e-05	8.898646e-05	7.236978e-04	1.442904e-03	1.253969e-03	1.031778e-03	4.265050e-04
0.079433	1.862758e-05	6.561114e-05	5.952244e-04	1.209651e-03	1.061232e-03	8.667563e-04	3.501302e-04
0.089125	1.305160e-05	4.795511e-05	4.852172e-04	1.005010e-03	8.934496e-04	7.250845e-04	2.875311e-04
0.100000	9.089002e-06	3.482097e-05	3.919737e-04	8.283625e-04	7.487466e-04	6.042987e-04	2.360815e-04
0.112202	6.313563e-06	2.516799e-05	3.138361e-04	6.781235e-04	6.249336e-04	5.019869e-04	1.929861e-04
0.125893	4.383724e-06	1.814122e-05	2.491850e-04	5.519814e-04	5.197327e-04	4.158302e-04	1.559528e-04
0.141254	3.060821e-06	1.306432e-05	1.964047e-04	4.472422e-04	4.309022e-04	3.435472e-04	1.243202e-04
0.158489	2.158899e-06	9.421493e-06	1.538833e-04	3.610403e-04	3.563057e-04	2.829515e-04	9.851050e-05

0.177828	1.537156e-06	6.825079e-06	1.200441e-04	2.905591e-04	2.939391e-04	2.323793e-04	7.776649e-05
0.199526	1.108864e-06	4.980557e-06	9.338749e-05	2.331996e-04	2.419316e-04	1.903616e-04	6.105261e-05
0.223872	8.137315e-07	3.667365e-06	7.253293e-05	1.866610e-04	1.985885e-04	1.554607e-04	4.755182e-05
0.251189	6.077676e-07	2.728698e-06	5.626932e-05	1.489779e-04	1.624758e-04	1.264338e-04	3.666130e-05
0.281838	4.622336e-07	2.054205e-06	4.359883e-05	1.185202e-04	1.324233e-04	1.024002e-04	2.797565e-05
0.316228	3.578412e-07	1.567113e-06	3.373638e-05	9.395952e-05	1.074743e-04	8.255312e-05	2.113406e-05
0.354813	2.816253e-07	1.211829e-06	2.605789e-05	7.420917e-05	8.684427e-05	6.609217e-05	1.578526e-05
0.398107	2.251063e-07	9.481581e-07	2.007449e-05	5.839358e-05	6.985135e-05	5.261098e-05	1.162478e-05
0.446684	1.817514e-07	7.497281e-07	1.542918e-05	4.578558e-05	5.587062e-05	4.164180e-05	8.419922e-06
0.501187	1.475678e-07	5.975366e-07	1.183339e-05	3.573743e-05	4.438894e-05	3.268183e-05	6.004206e-06
0.562341	1.201274e-07	4.781894e-07	9.039269e-06	2.770920e-05	3.502866e-05	2.538515e-05	4.207602e-06
0.630957	9.751676e-08	3.829504e-07	6.872579e-06	2.131404e-05	2.745922e-05	1.952762e-05	2.897566e-06
0.707946	7.872849e-08	3.061534e-07	5.209976e-06	1.625790e-05	2.138387e-05	1.485738e-05	1.952489e-06
0.794328	6.314503e-08	2.440072e-07	3.936777e-06	1.228307e-05	1.652905e-05	1.116164e-05	1.291055e-06
0.891251	5.023623e-08	1.937216e-07	2.950973e-06	9.180573e-06	1.266131e-05	8.277970e-06	8.340716e-07
1.000000	3.957702e-08	1.530032e-07	2.179308e-06	6.790316e-06	9.596126e-06	6.044671e-06	5.282856e-07
1.122019	3.085523e-08	1.199897e-07	1.578891e-06	4.974214e-06	7.191595e-06	4.329676e-06	3.262505e-07
1.258925	2.382096e-08	9.315340e-08	1.125564e-06	3.602278e-06	5.331899e-06	3.033170e-06	1.967846e-07
1.412538	1.824647e-08	7.137750e-08	7.963796e-07	2.565254e-06	3.909289e-06	2.077037e-06	1.155036e-07
1.584893	1.390845e-08	5.385369e-08	5.621162e-07	1.787695e-06	2.827209e-06	1.392857e-06	6.593965e-08
1.778279	1.056691e-08	3.998975e-08	3.941980e-07	1.215970e-06	2.008998e-06	9.164280e-07	3.676034e-08
1.995262	7.989379e-09	2.929179e-08	2.716915e-07	8.063528e-07	1.399683e-06	5.923167e-07	1.993679e-08
2.238721	5.988657e-09	2.126903e-08	1.821311e-07	5.223981e-07	9.572329e-07	3.759742e-07	1.041715e-08
2.511886	4.436359e-09	1.540234e-08	1.186863e-07	3.324919e-07	6.433855e-07	2.333994e-07	5.123065e-09
2.818383	3.244752e-09	1.117893e-08	7.609359e-08	2.094177e-07	4.246237e-07	1.403826e-07	2.226011e-09
3.162278	2.345850e-09	8.147764e-09	4.870479e-08	1.313278e-07	2.742391e-07	8.088843e-08	7.896829e-10
3.548134	1.678850e-09	5.950768e-09	3.129139e-08	8.212465e-08	1.727497e-07	4.416286e-08	2.099526e-10
3.981072	1.190295e-09	4.332794e-09	2.007386e-08	5.095404e-08	1.059026e-07	2.254357e-08	3.393175e-11
4.466836	8.358579e-10	3.127771e-09	1.273463e-08	3.103076e-08	6.276935e-08	1.055551e-08	2.607376e-12
5.011872	5.810775e-10	2.229277e-09	7.924080e-09	1.826326e-08	3.545545e-08	4.422431e-09	8.167408e-14
5.623413	4.263088e-10	1.654728e-09	5.395688e-09	1.173895e-08	2.213772e-08	2.460620e-09	4.083910e-14
6.309573	2.715401e-10	1.080179e-09	2.867296e-09	5.214648e-09	8.820006e-09	4.988094e-10	4.114564e-18

Cooper (40.36° N, 95.64° E), Response Spectra

Frequency (Hz)	UHRS 1E-4 (g)	GMRS (g)	UHRS 1E-5 (g)
0.500000	0.043726	0.049630	0.097007
0.561009	0.047371	0.054010	0.105688
0.629463	0.051456	0.058952	0.115498
0.706269	0.055816	0.064234	0.125987
0.792447	0.060116	0.069483	0.136430
0.889140	0.064027	0.074291	0.146014
0.997631	0.067571	0.078776	0.155012
1.000000	0.067644	0.078869	0.155198
1.122019	0.070739	0.085433	0.169601
1.258925	0.074531	0.093614	0.187672
1.412538	0.080504	0.105680	0.214214
1.584893	0.090172	0.124095	0.254528

1.778279	0.107828	0.153419	0.317304
1.995262	0.134008	0.190383	0.393607
2.238721	0.162871	0.228106	0.469917
2.500000	0.193365	0.263285	0.538579
2.805046	0.224680	0.303778	0.620320
3.147313	0.251335	0.343028	0.702116
3.531344	0.274970	0.375822	0.769514
3.962233	0.292548	0.401658	0.823346
4.445698	0.303096	0.415675	0.851841
4.988156	0.306609	0.420457	0.861622
5.000000	0.306712	0.420545	0.861774
5.610092	0.295194	0.413080	0.850800
6.294627	0.284474	0.404895	0.837488
7.062688	0.281751	0.406347	0.843269
7.924466	0.289613	0.423042	0.880716
8.891397	0.307002	0.445591	0.926180
9.976312	0.328308	0.473136	0.981686
10.000000	0.328783	0.473788	0.983023
11.220185	0.331293	0.477344	0.990370
12.589254	0.329928	0.472990	0.980101
14.125375	0.321734	0.458144	0.947742
15.848932	0.309198	0.441011	0.912668
17.782794	0.302097	0.427358	0.882599
19.952623	0.292515	0.412774	0.851951
22.387211	0.285433	0.401754	0.828676
25.000000	0.277637	0.386514	0.795056
28.050461	0.267091	0.369707	0.759397
31.473135	0.259113	0.355642	0.728963
35.313439	0.251084	0.343280	0.702938
39.622330	0.243047	0.327424	0.668001
44.456985	0.234082	0.312466	0.636023
49.881558	0.225561	0.297458	0.603640
55.968028	0.216601	0.282587	0.571921
62.797161	0.207121	0.268645	0.542911
70.459573	0.197660	0.255349	0.515523
79.056942	0.187773	0.242416	0.489332
88.703347	0.177703	0.230398	0.465570
99.526793	0.168515	0.220624	0.446906
100.000000	0.157317	0.207099	0.420087