

LaSalle (41.25° N, 88.67° 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 | 6.785379e-03 | 1.166012e-02 | 1.789523e-02 | 1.917810e-02 | 1.942200e-02 | 1.912478e-02 | 1.763192e-02 |
| 0.001122 | 6.717415e-03 | 1.165234e-02 | 1.789503e-02 | 1.917810e-02 | 1.942200e-02 | 1.912478e-02 | 1.763192e-02 |
| 0.001259 | 6.421452e-03 | 1.150785e-02 | 1.789439e-02 | 1.917810e-02 | 1.942200e-02 | 1.912478e-02 | 1.763192e-02 |
| 0.001413 | 6.049218e-03 | 1.120374e-02 | 1.789256e-02 | 1.917810e-02 | 1.942200e-02 | 1.912478e-02 | 1.763192e-02 |
| 0.001585 | 5.691936e-03 | 1.077778e-02 | 1.788798e-02 | 1.917810e-02 | 1.942197e-02 | 1.912478e-02 | 1.763192e-02 |
| 0.001778 | 5.356221e-03 | 1.029255e-02 | 1.787787e-02 | 1.917809e-02 | 1.942159e-02 | 1.912473e-02 | 1.763191e-02 |
| 0.001995 | 5.040974e-03 | 9.765424e-03 | 1.785801e-02 | 1.917786e-02 | 1.941824e-02 | 1.912338e-02 | 1.763141e-02 |
| 0.002239 | 4.744784e-03 | 9.210435e-03 | 1.782315e-02 | 1.917360e-02 | 1.939985e-02 | 1.910847e-02 | 1.762411e-02 |
| 0.002512 | 4.465912e-03 | 8.652658e-03 | 1.776773e-02 | 1.914168e-02 | 1.933955e-02 | 1.902979e-02 | 1.757703e-02 |
| 0.002818 | 4.202729e-03 | 8.109539e-03 | 1.768618e-02 | 1.903622e-02 | 1.921576e-02 | 1.884082e-02 | 1.741680e-02 |
| 0.003162 | 3.953041e-03 | 7.588417e-03 | 1.756955e-02 | 1.884575e-02 | 1.903254e-02 | 1.858590e-02 | 1.707903e-02 |
| 0.003548 | 3.715093e-03 | 7.091526e-03 | 1.739363e-02 | 1.859138e-02 | 1.880159e-02 | 1.828892e-02 | 1.659568e-02 |
| 0.003981 | 3.486375e-03 | 6.619712e-03 | 1.711761e-02 | 1.828310e-02 | 1.852608e-02 | 1.794718e-02 | 1.604334e-02 |
| 0.004467 | 3.265211e-03 | 6.173011e-03 | 1.672975e-02 | 1.792378e-02 | 1.820440e-02 | 1.755834e-02 | 1.544720e-02 |
| 0.005012 | 3.049137e-03 | 5.750809e-03 | 1.625765e-02 | 1.751454e-02 | 1.783466e-02 | 1.712271e-02 | 1.481298e-02 |
| 0.005623 | 2.836871e-03 | 5.352086e-03 | 1.572529e-02 | 1.705563e-02 | 1.741566e-02 | 1.664082e-02 | 1.414745e-02 |
| 0.006310 | 2.626634e-03 | 4.975105e-03 | 1.514680e-02 | 1.654757e-02 | 1.694716e-02 | 1.611415e-02 | 1.345806e-02 |
| 0.007079 | 2.418010e-03 | 4.618050e-03 | 1.453240e-02 | 1.599215e-02 | 1.643041e-02 | 1.554601e-02 | 1.275213e-02 |
| 0.007943 | 2.211998e-03 | 4.278429e-03 | 1.388954e-02 | 1.539284e-02 | 1.586829e-02 | 1.494125e-02 | 1.203714e-02 |
| 0.008913 | 2.013698e-03 | 3.954026e-03 | 1.322439e-02 | 1.475449e-02 | 1.526497e-02 | 1.430555e-02 | 1.132048e-02 |
| 0.010000 | 1.820900e-03 | 3.642268e-03 | 1.254304e-02 | 1.408290e-02 | 1.462565e-02 | 1.364488e-02 | 1.060872e-02 |
| 0.011220 | 1.632101e-03 | 3.341258e-03 | 1.185185e-02 | 1.338466e-02 | 1.395635e-02 | 1.296582e-02 | 9.907225e-03 |
| 0.012589 | 1.448646e-03 | 3.049246e-03 | 1.115726e-02 | 1.266681e-02 | 1.326364e-02 | 1.227461e-02 | 9.220069e-03 |
| 0.014125 | 1.272139e-03 | 2.765419e-03 | 1.046544e-02 | 1.193666e-02 | 1.255441e-02 | 1.157768e-02 | 8.550220e-03 |
| 0.015849 | 1.105196e-03 | 2.490511e-03 | 9.782113e-03 | 1.120139e-02 | 1.183542e-02 | 1.088056e-02 | 7.899576e-03 |
| 0.017783 | 9.487416e-04 | 2.227110e-03 | 9.112331e-03 | 1.046768e-02 | 1.111306e-02 | 1.018837e-02 | 7.269339e-03 |
| 0.019953 | 8.039773e-04 | 1.975565e-03 | 8.460353e-03 | 9.741431e-03 | 1.039305e-02 | 9.505211e-03 | 6.660245e-03 |
| 0.022387 | 6.716387e-04 | 1.736682e-03 | 7.829555e-03 | 9.027599e-03 | 9.680401e-03 | 8.834756e-03 | 6.072972e-03 |
| 0.025119 | 5.539548e-04 | 1.511870e-03 | 7.222319e-03 | 8.330170e-03 | 8.979320e-03 | 8.179896e-03 | 5.507729e-03 |
| 0.028184 | 4.510050e-04 | 1.302910e-03 | 6.640089e-03 | 7.652062e-03 | 8.293270e-03 | 7.543027e-03 | 4.960391e-03 |
| 0.031623 | 3.623404e-04 | 1.110964e-03 | 6.083426e-03 | 6.995439e-03 | 7.625132e-03 | 6.925258e-03 | 4.417753e-03 |
| 0.035481 | 2.871786e-04 | 9.367534e-04 | 5.552223e-03 | 6.361912e-03 | 6.977321e-03 | 6.319394e-03 | 3.869790e-03 |
| 0.039811 | 2.248392e-04 | 7.807130e-04 | 5.045877e-03 | 5.752753e-03 | 6.351844e-03 | 5.695345e-03 | 3.338743e-03 |
| 0.044668 | 1.739110e-04 | 6.428963e-04 | 4.563585e-03 | 5.169412e-03 | 5.749661e-03 | 5.063775e-03 | 2.851114e-03 |
| 0.050119 | 1.330042e-04 | 5.231571e-04 | 4.104598e-03 | 4.613819e-03 | 5.169162e-03 | 4.462754e-03 | 2.415658e-03 |
| 0.056234 | 1.005667e-04 | 4.209455e-04 | 3.668393e-03 | 4.087775e-03 | 4.608828e-03 | 3.904817e-03 | 2.033573e-03 |
| 0.063096 | 7.530643e-05 | 3.350789e-04 | 3.254786e-03 | 3.592078e-03 | 4.073084e-03 | 3.393019e-03 | 1.703021e-03 |
| 0.070795 | 5.587569e-05 | 2.641322e-04 | 2.863519e-03 | 3.128428e-03 | 3.570154e-03 | 2.928907e-03 | 1.420657e-03 |
| 0.079433 | 4.114604e-05 | 2.063741e-04 | 2.494201e-03 | 2.700207e-03 | 3.106373e-03 | 2.512876e-03 | 1.182054e-03 |
| 0.089125 | 3.011267e-05 | 1.600710e-04 | 2.148026e-03 | 2.310314e-03 | 2.684773e-03 | 2.144018e-03 | 9.816196e-04 |
| 0.100000 | 2.194776e-05 | 1.233608e-04 | 1.828056e-03 | 1.960616e-03 | 2.306078e-03 | 1.820353e-03 | 8.140674e-04 |
| 0.112202 | 1.596469e-05 | 9.458874e-05 | 1.536995e-03 | 1.651611e-03 | 1.969620e-03 | 1.538999e-03 | 6.751120e-04 |
| 0.125893 | 1.162887e-05 | 7.226362e-05 | 1.276729e-03 | 1.382229e-03 | 1.673739e-03 | 1.296449e-03 | 5.551634e-04 |
| 0.141254 | 8.503631e-06 | 5.510373e-05 | 1.048254e-03 | 1.150224e-03 | 1.416013e-03 | 1.088778e-03 | 4.504891e-04 |
| 0.158489 | 6.248014e-06 | 4.199630e-05 | 8.513321e-04 | 9.525914e-04 | 1.193429e-03 | 9.114303e-04 | 3.625236e-04 |

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|----------|--------------|--------------|--------------|--------------|--------------|--------------|--------------|
| 0.177828 | 4.628085e-06 | 3.203117e-05 | 6.845127e-04 | 7.858498e-04 | 1.002555e-03 | 7.605233e-04 | 2.912511e-04 |
| 0.199526 | 3.463575e-06 | 2.448070e-05 | 5.453483e-04 | 6.463013e-04 | 8.397042e-04 | 6.328516e-04 | 2.330010e-04 |
| 0.223872 | 2.620971e-06 | 1.877109e-05 | 4.307554e-04 | 5.301809e-04 | 7.012469e-04 | 5.250742e-04 | 1.856709e-04 |
| 0.251189 | 2.005670e-06 | 1.445393e-05 | 3.375396e-04 | 4.338115e-04 | 5.838555e-04 | 4.349344e-04 | 1.465376e-04 |
| 0.281838 | 1.550614e-06 | 1.118280e-05 | 2.627513e-04 | 3.539055e-04 | 4.844803e-04 | 3.595009e-04 | 1.149880e-04 |
| 0.316228 | 1.209697e-06 | 8.695263e-06 | 2.035685e-04 | 2.878809e-04 | 4.004648e-04 | 2.964192e-04 | 8.945940e-05 |
| 0.354813 | 9.497788e-07 | 6.793657e-06 | 1.571915e-04 | 2.336862e-04 | 3.297658e-04 | 2.434040e-04 | 6.896332e-05 |
| 0.398107 | 7.494458e-07 | 5.330576e-06 | 1.210603e-04 | 1.893504e-04 | 2.706461e-04 | 1.985967e-04 | 5.260046e-05 |
| 0.446684 | 5.934828e-07 | 4.195565e-06 | 9.308512e-05 | 1.529523e-04 | 2.213245e-04 | 1.609811e-04 | 3.939812e-05 |
| 0.501187 | 4.705104e-07 | 3.309213e-06 | 7.157063e-05 | 1.230642e-04 | 1.801474e-04 | 1.295890e-04 | 2.917394e-05 |
| 0.562341 | 3.728630e-07 | 2.613649e-06 | 5.505328e-05 | 9.869878e-05 | 1.457965e-04 | 1.035785e-04 | 2.123533e-05 |
| 0.630957 | 2.953103e-07 | 2.065772e-06 | 4.231954e-05 | 7.886348e-05 | 1.172731e-04 | 8.213005e-05 | 1.516607e-05 |
| 0.707946 | 2.337266e-07 | 1.633292e-06 | 3.245653e-05 | 6.259604e-05 | 9.371461e-05 | 6.453662e-05 | 1.064167e-05 |
| 0.794328 | 1.847677e-07 | 1.291615e-06 | 2.480859e-05 | 4.930179e-05 | 7.433772e-05 | 5.013552e-05 | 7.341509e-06 |
| 0.891251 | 1.457173e-07 | 1.021606e-06 | 1.888692e-05 | 3.850857e-05 | 5.844779e-05 | 3.845085e-05 | 4.947880e-06 |
| 1.000000 | 1.143590e-07 | 8.080539e-07 | 1.430847e-05 | 2.978725e-05 | 4.546799e-05 | 2.908019e-05 | 3.261428e-06 |
| 1.122019 | 8.909662e-08 | 6.385186e-07 | 1.077370e-05 | 2.282057e-05 | 3.496662e-05 | 2.163444e-05 | 2.106598e-06 |
| 1.258925 | 6.884894e-08 | 5.031906e-07 | 8.046179e-06 | 1.729965e-05 | 2.657067e-05 | 1.579866e-05 | 1.329638e-06 |
| 1.412538 | 5.272547e-08 | 3.948021e-07 | 5.943978e-06 | 1.294175e-05 | 1.995037e-05 | 1.130913e-05 | 8.168534e-07 |
| 1.584893 | 4.003057e-08 | 3.080294e-07 | 4.337769e-06 | 9.535904e-06 | 1.477862e-05 | 7.943036e-06 | 4.862464e-07 |
| 1.778279 | 3.011844e-08 | 2.387509e-07 | 3.130154e-06 | 6.896048e-06 | 1.076862e-05 | 5.483298e-06 | 2.802672e-07 |
| 1.995262 | 2.241621e-08 | 1.836491e-07 | 2.235784e-06 | 4.900990e-06 | 7.699495e-06 | 3.718089e-06 | 1.556190e-07 |
| 2.238721 | 1.647623e-08 | 1.400455e-07 | 1.579943e-06 | 3.431830e-06 | 5.387514e-06 | 2.476908e-06 | 8.272927e-08 |
| 2.511886 | 1.195286e-08 | 1.057875e-07 | 1.103411e-06 | 2.363411e-06 | 3.684651e-06 | 1.613960e-06 | 4.148152e-08 |
| 2.818383 | 8.562653e-09 | 7.911852e-08 | 7.611206e-07 | 1.599729e-06 | 2.466788e-06 | 1.015606e-06 | 1.921994e-08 |
| 3.162278 | 6.062182e-09 | 5.856176e-08 | 5.181951e-07 | 1.061952e-06 | 1.617233e-06 | 6.119185e-07 | 8.012308e-09 |
| 3.548134 | 4.243953e-09 | 4.285172e-08 | 3.480623e-07 | 6.894407e-07 | 1.039106e-06 | 3.508232e-07 | 2.908171e-09 |
| 3.981072 | 2.937657e-09 | 3.092568e-08 | 2.303515e-07 | 4.346830e-07 | 6.527503e-07 | 1.899305e-07 | 8.739541e-10 |
| 4.466836 | 2.009229e-09 | 2.194944e-08 | 1.494375e-07 | 2.637735e-07 | 3.981179e-07 | 9.616014e-08 | 1.982229e-10 |
| 5.011872 | 1.356593e-09 | 1.530671e-08 | 9.427811e-08 | 1.524797e-07 | 2.333420e-07 | 4.492490e-08 | 3.036116e-11 |
| 5.623413 | 9.741921e-10 | 1.120831e-08 | 6.406719e-08 | 9.787401e-08 | 1.499621e-07 | 2.605369e-08 | 1.526026e-11 |
| 6.309573 | 5.917911e-10 | 7.109905e-09 | 3.385627e-08 | 4.326830e-08 | 6.658228e-08 | 7.182480e-09 | 1.593463e-13 |

LaSalle (41.25° N, 88.67° E), Response Spectra

| Frequency (Hz) | UHRS 1E-4 (g) | GMRS (g) | UHRS 1E-5 (g) |
|----------------|---------------|----------|---------------|
| 0.500000 | 0.056361 | 0.067241 | 0.133078 |
| 0.561009 | 0.061460 | 0.074429 | 0.147857 |
| 0.629463 | 0.067296 | 0.082764 | 0.165050 |
| 0.706269 | 0.074373 | 0.092955 | 0.186122 |
| 0.792447 | 0.083001 | 0.105563 | 0.212289 |
| 0.889140 | 0.094203 | 0.122358 | 0.247363 |
| 0.997631 | 0.109179 | 0.145284 | 0.295494 |
| 1.000000 | 0.109528 | 0.145824 | 0.296631 |
| 1.122019 | 0.134540 | 0.189795 | 0.391701 |
| 1.258925 | 0.170801 | 0.247523 | 0.514289 |
| 1.412538 | 0.221739 | 0.312909 | 0.645837 |
| 1.584893 | 0.275901 | 0.375631 | 0.768378 |

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| 1.778279 | 0.320975 | 0.431981 | 0.881098 |
| 1.995262 | 0.366556 | 0.485963 | 0.987485 |
| 2.238721 | 0.402774 | 0.530593 | 1.076458 |
| 2.500000 | 0.432878 | 0.569687 | 1.155486 |
| 2.805046 | 0.461060 | 0.621074 | 1.267071 |
| 3.147313 | 0.481399 | 0.658552 | 1.348722 |
| 3.531344 | 0.494695 | 0.684352 | 1.405483 |
| 3.962233 | 0.506879 | 0.704839 | 1.449431 |
| 4.445698 | 0.527790 | 0.731287 | 1.502468 |
| 4.988156 | 0.558511 | 0.760910 | 1.556753 |
| 5.000000 | 0.559180 | 0.761524 | 1.557857 |
| 5.610092 | 0.583334 | 0.798361 | 1.635239 |
| 6.294627 | 0.618016 | 0.841011 | 1.720138 |
| 7.062688 | 0.644810 | 0.872065 | 1.780899 |
| 7.924466 | 0.667126 | 0.895335 | 1.824907 |
| 8.891397 | 0.679470 | 0.902813 | 1.835548 |
| 9.976312 | 0.684634 | 0.899783 | 1.824394 |
| 10.000000 | 0.684741 | 0.899675 | 1.824049 |
| 11.220185 | 0.655751 | 0.852964 | 1.725001 |
| 12.589254 | 0.627621 | 0.811938 | 1.639796 |
| 14.125375 | 0.611937 | 0.781805 | 1.574011 |
| 15.848932 | 0.601910 | 0.758834 | 1.522691 |
| 17.782794 | 0.588367 | 0.751142 | 1.512000 |
| 19.952623 | 0.585065 | 0.748215 | 1.506757 |
| 22.387211 | 0.572238 | 0.730457 | 1.470314 |
| 25.000000 | 0.552207 | 0.705646 | 1.420755 |
| 28.050461 | 0.525293 | 0.667708 | 1.342592 |
| 31.473135 | 0.496544 | 0.625667 | 1.255308 |
| 35.313439 | 0.473599 | 0.590432 | 1.181465 |
| 39.622330 | 0.453171 | 0.561653 | 1.122227 |
| 44.456985 | 0.435044 | 0.534452 | 1.065524 |
| 49.881558 | 0.416006 | 0.508930 | 1.013582 |
| 55.968028 | 0.399064 | 0.483685 | 0.961066 |
| 62.797161 | 0.381460 | 0.460075 | 0.913028 |
| 70.459573 | 0.365187 | 0.439160 | 0.870884 |
| 79.056942 | 0.349428 | 0.419018 | 0.830353 |
| 88.703347 | 0.334027 | 0.401283 | 0.795571 |
| 99.526793 | 0.320783 | 0.386540 | 0.766921 |
| 100.000000 | 0.300480 | 0.363426 | 0.721733 |