

Appendix - I

| Time Sample | 0-2 HZ | 2-4 HZ | 4-6 HZ | 6-8 HZ | 8-10 HZ | 10-12 HZ | 12-14 HZ | 14-16 HZ | 16-18 HZ | 18-20 HZ | 20-22 HZ | 22-24 HZ | 24-26 HZ | 26-28 HZ | 28-30 HZ | 30-32 HZ |
|-------------|----------|----------|----------|----------|----------|----------|----------|----------|----------|----------|----------|----------|----------|----------|----------|----------|
| 0 | 1.35828 | 1.74389 | 1.44994 | 0.674971 | 0.860662 | 1.10993 | 1.04472 | 0.998376 | 0.847789 | 0.669102 | 0.585598 | 0.54468 | 0.590571 | 0.653404 | 0.699901 | 0.706241 |
| 1 | 0.438783 | 0.667411 | 0.680097 | 0.644201 | 0.808986 | 0.988188 | 0.93937 | 0.889111 | 0.82028 | 0.769101 | 0.725864 | 0.662606 | 0.585648 | 0.540778 | 0.543362 | 0.550886 |
| 2 | 0.436503 | 0.62865 | 0.651806 | 0.825894 | 1.14409 | 1.35641 | 1.28149 | 1.14597 | 0.901831 | 0.620965 | 0.635058 | 0.637514 | 0.626274 | 0.599822 | 0.584263 | 0.590774 |
| 3 | 0.453108 | 0.5432 | 0.546083 | 0.649252 | 0.847049 | 0.937918 | 0.864917 | 0.81414 | 0.783215 | 0.783224 | 0.774775 | 0.734718 | 0.669371 | 0.594708 | 0.527418 | 0.50122 |
| 4 | 0.531107 | 0.717511 | 0.784995 | 0.874038 | 1.06425 | 1.18306 | 1.07112 | 0.927551 | 0.706991 | 0.527044 | 0.508089 | 0.553486 | 0.625008 | 0.692308 | 0.738101 | 0.743842 |
| 5 | 0.497286 | 0.587453 | 0.585942 | 0.640206 | 0.719392 | 0.762657 | 0.785685 | 0.778212 | 0.750229 | 0.717714 | 0.693912 | 0.673887 | 0.639896 | 0.583641 | 0.523086 | 0.495677 |
| 6 | 0.530498 | 0.592875 | 0.585384 | 0.612277 | 0.771635 | 0.861503 | 0.816625 | 0.775368 | 0.717325 | 0.661759 | 0.616037 | 0.579719 | 0.546072 | 0.510299 | 0.493588 | 0.52439 |
| 7 | 0.540619 | 0.655888 | 0.666928 | 0.758922 | 0.956371 | 1.02279 | 0.891266 | 0.764202 | 0.661812 | 0.6803 | 0.686155 | 0.654238 | 0.60208 | 0.598087 | 0.63216 | 0.650209 |
| 8 | 0.528218 | 0.657065 | 0.684125 | 0.709987 | 0.816737 | 0.89885 | 0.881681 | 0.874401 | 0.85794 | 0.828919 | 0.773991 | 0.689682 | 0.598532 | 0.568144 | 0.581296 | 0.602982 |
| 9 | 0.573323 | 0.709093 | 0.714754 | 0.748314 | 0.882567 | 0.996158 | 0.952927 | 0.911599 | 0.867945 | 0.839893 | 0.80257 | 0.732223 | 0.640922 | 0.574793 | 0.552505 | 0.530121 |
| 10 | 0.458726 | 0.620663 | 0.714163 | 1.01441 | 1.28856 | 1.32223 | 1.13187 | 0.911786 | 0.637703 | 0.607041 | 0.598501 | 0.590934 | 0.555531 | 0.55733 | 0.578671 | 0.584892 |
| 11 | 0.535626 | 0.838146 | 0.78216 | 0.701131 | 0.79788 | 0.842987 | 0.755654 | 0.702635 | 0.680434 | 0.68881 | 0.677328 | 0.627299 | 0.564126 | 0.540813 | 0.566888 | 0.600364 |
| 12 | 0.796605 | 0.799278 | 0.734381 | 0.749567 | 0.857544 | 0.920763 | 0.86531 | 0.804763 | 0.746219 | 0.725642 | 0.716814 | 0.678629 | 0.606594 | 0.545476 | 0.552283 | 0.585959 |
| 13 | 0.56435 | 0.63884 | 0.718661 | 0.810169 | 0.843382 | 0.852745 | 0.873202 | 0.844658 | 0.785382 | 0.715561 | 0.669964 | 0.65479 | 0.638759 | 0.605315 | 0.56764 | 0.548858 |
| 14 | 0.551497 | 0.657343 | 0.654992 | 0.692625 | 0.757383 | 0.749803 | 0.745034 | 0.75193 | 0.757267 | 0.740502 | 0.689103 | 0.613642 | 0.55939 | 0.565488 | 0.590024 | 0.587136 |
| 15 | 0.414121 | 0.57964 | 0.665686 | 0.889126 | 1.03387 | 0.989999 | 0.873481 | 0.738647 | 0.629872 | 0.599258 | 0.571566 | 0.552053 | 0.543865 | 0.539555 | 0.522357 | 0.497472 |
| 16 | 0.579519 | 0.652641 | 0.666592 | 0.821423 | 0.967908 | 0.944919 | 0.903698 | 0.860798 | 0.810141 | 0.740754 | 0.654216 | 0.590629 | 0.587463 | 0.592277 | 0.582444 | 0.575462 |
| 17 | 0.555894 | 0.666909 | 0.696238 | 0.71422 | 0.781554 | 0.846997 | 0.810839 | 0.767683 | 0.716359 | 0.679835 | 0.651375 | 0.611724 | 0.562528 | 0.529825 | 0.528806 | 0.538622 |
| 18 | 0.431992 | 0.504738 | 0.523556 | 0.725639 | 0.969252 | 1.06582 | 0.965112 | 0.843291 | 0.691938 | 0.619655 | 0.635076 | 0.643794 | 0.626684 | 0.602478 | 0.57582 | 0.541611 |
| 19 | 0.432902 | 0.540874 | 0.615081 | 0.736834 | 0.821559 | 0.864011 | 0.868368 | 0.818078 | 0.727788 | 0.640327 | 0.619104 | 0.635896 | 0.630446 | 0.586557 | 0.522651 | 0.47157 |
| 20 | 0.605778 | 0.691563 | 0.646982 | 0.754675 | 0.897466 | 0.897523 | 0.835009 | 0.76553 | 0.69665 | 0.641847 | 0.589098 | 0.540312 | 0.522821 | 0.534397 | 0.541854 | 0.530682 |
| 21 | 0.575172 | 0.65467 | 0.588817 | 0.538638 | 0.614399 | 0.654016 | 0.653418 | 0.673667 | 0.690963 | 0.690562 | 0.658623 | 0.595406 | 0.519026 | 0.467704 | 0.456549 | 0.470002 |
| 22 | 0.617555 | 0.696448 | 0.674385 | 0.685216 | 0.759595 | 0.77192 | 0.775828 | 0.796032 | 0.805192 | 0.78384 | 0.725079 | 0.643608 | 0.573565 | 0.535743 | 0.510593 | 0.467969 |
| 23 | 0.466222 | 0.562005 | 0.663419 | 0.878947 | 1.07624 | 1.0936 | 0.982874 | 0.870638 | 0.761434 | 0.688754 | 0.629235 | 0.56269 | 0.518795 | 0.521207 | 0.534791 | 0.53355 |
| 24 | 0.499172 | 0.677942 | 0.733811 | 0.718836 | 0.843977 | 0.987394 | 0.939116 | 0.872747 | 0.766098 | 0.663004 | 0.594629 | 0.542384 | 0.490493 | 0.464515 | 0.466858 | 0.467802 |
| 25 | 0.460252 | 0.669813 | 0.659707 | 0.758931 | 0.872222 | 0.848199 | 0.779251 | 0.711694 | 0.662042 | 0.629203 | 0.588674 | 0.551865 | 0.559128 | 0.592375 | 0.610158 | 0.603674 |
| 26 | 0.493701 | 0.672717 | 0.729018 | 0.815027 | 0.977259 | 1.03436 | 0.958062 | 0.867631 | 0.754709 | 0.668887 | 0.623492 | 0.613043 | 0.613079 | 0.607017 | 0.580593 | 0.533739 |
| 27 | 0.46451 | 0.529241 | 0.595311 | 0.680171 | 0.791219 | 0.8293 | 0.825284 | 0.833846 | 0.826065 | 0.785237 | 0.705636 | 0.605846 | 0.536056 | 0.527988 | 0.53898 | 0.537149 |
| 28 | 0.520304 | 0.598084 | 0.614462 | 0.718485 | 0.849291 | 0.865612 | 0.785433 | 0.745582 | 0.73933 | 0.739124 | 0.707304 | 0.643302 | 0.575186 | 0.525229 | 0.482116 | 0.440637 |
| 29 | 0.588534 | 0.656571 | 0.685593 | 0.876348 | 1.11504 | 1.17619 | 1.04915 | 0.900321 | 0.708234 | 0.606767 | 0.554668 | 0.542534 | 0.542852 | 0.535408 | 0.516342 | 0.497703 |
| 30 | 0.51266 | 0.642857 | 0.724978 | 0.892848 | 1.07187 | 1.12991 | 1.00522 | 0.860849 | 0.688185 | 0.616024 | 0.597491 | 0.575133 | 0.561389 | 0.552336 | 0.533888 | 0.497986 |
| 31 | 0.685245 | 0.709555 | 0.646371 | 0.744283 | 0.949674 | 1.04296 | 0.978022 | 0.899268 | 0.794134 | 0.698597 | 0.619103 | 0.549402 | 0.521985 | 0.547306 | 0.563364 | 0.544832 |
| 32 | 0.411392 | 0.724282 | 0.702582 | 0.654321 | 0.900364 | 1.06606 | 1.00139 | 0.958644 | 0.902934 | 0.845243 | 0.761666 | 0.636761 | 0.524226 | 0.514842 | 0.531312 | 0.526368 |
| 33 | 0.485572 | 0.663494 | 0.739438 | 0.771421 | 0.774757 | 0.73009 | 0.666459 | 0.642025 | 0.658137 | 0.669347 | 0.643814 | 0.581402 | 0.506591 | 0.463479 | 0.449363 | 0.454561 |
| 34 | 0.61279 | 0.675432 | 0.683008 | 0.765393 | 0.867723 | 0.861963 | 0.78269 | 0.700163 | 0.628449 | 0.595331 | 0.57915 | 0.552253 | 0.511367 | 0.469749 | 0.444198 | 0.440924 |
| 35 | 0.404543 | 0.497026 | 0.620714 | 0.85579 | 1.09492 | 1.15979 | 1.01558 | 0.858618 | 0.675235 | 0.597713 | 0.56272 | 0.524161 | 0.468235 | 0.446591 | 0.43997 | 0.451263 |
| 36 | 0.373578 | 0.602727 | 0.682236 | 0.776161 | 0.923328 | 0.978981 | 0.884391 | 0.790798 | 0.693768 | 0.640539 | 0.621281 | 0.60016 | 0.566993 | 0.523064 | 0.472886 | 0.444801 |
| 37 | 0.652496 | 0.693016 | 0.765592 | 0.886124 | 0.911426 | 0.83708 | 0.762098 | 0.674697 | 0.623596 | 0.608357 | 0.596822 | 0.573838 | 0.535731 | 0.483798 | 0.431316 | 0.408698 |
| 38 | 0.380804 | 0.494092 | 0.529787 | 0.622932 | 0.834298 | 0.967491 | 0.948766 | 0.908163 | 0.830527 | 0.738396 | 0.643203 | 0.543347 | 0.444085 | 0.381442 | 0.376606 | 0.38853 |
| 39 | 0.707815 | 0.872536 | 0.812671 | 0.792553 | 0.836224 | 0.763813 | 0.672068 | 0.583502 | 0.533372 | 0.534289 | 0.543258 | 0.541225 | 0.526747 | 0.50223 | 0.477351 | 0.46073 |
| 40 | 0.63442 | 0.792297 | 0.768751 | 0.964348 | 1.24619 | 1.30013 | 1.11885 | 0.906648 | 0.624484 | 0.627789 | 0.691622 | 0.720468 | 0.702131 | 0.643226 | 0.554917 | 0.464784 |
| 41 | 0.518788 | 0.539696 | 0.63813 | 0.743184 | 0.820228 | 0.847283 | 0.791045 | 0.745249 | 0.709962 | 0.686921 | 0.656604 | 0.612706 | 0.571519 | 0.551742 | 0.546226 | 0.541002 |
| 42 | 0.443821 | 0.613892 | 0.590954 | 0.600679 | 0.816594 | 0.926895 | 0.847104 | 0.77408 | 0.690282 | 0.640498 | 0.616603 | 0.587331 | 0.550779 | 0.519428 | 0.493995 | 0.469811 |
| 43 | 0.527448 | 0.669481 | 0.700315 | 0.721772 | 0.729483 | 0.752313 | 0.725439 | 0.708096 | 0.701807 | 0.702075 | 0.688643 | 0.651327 | 0.594419 | 0.531643 | 0.479611 | 0.45383 |
| 44 | 0.404324 | 0.563332 | 0.624634 | 0.665387 | 0.65297 | 0.597062 | 0.600054 | 0.615829 | 0.628026 | 0.607644 | 0.554787 | 0.505411 | 0.503668 | 0.521731 | 0.513528 | 0.471291 |
| 45 | 0.436958 | 0.548397 | 0.609132 | 0.611209 | 0.590834 | 0.621282 | 0.645369 | 0.701307 | 0.749202 | 0.760771 | 0.723301 | 0.642274 | 0.547608 | 0.493365 | 0.490634 | 0.497083 |
| 46 | 0.586583 | 0.690898 | 0.64677 | 0.768659 | 1.02659 | 1.116 | 1.00478 | 0.873596 | 0.70804 | 0.620582 | 0.634643 | 0.628563 | 0.584793 | 0.530471 | 0.493108 | 0.472573 |
| 47 | 0.479651 | 0.576072 | 0.554811 | 0.671771 | 0.873056 | 0.932458 | 0.842268 | 0.752547 | 0.66953 | 0.645208 | 0.642841 | 0.614981 | 0.564 | 0.521436 | 0.506578 | 0.498896 |

| | | | | | | | | | | | | | | | | |
|-----|----------|----------|----------|----------|----------|----------|----------|----------|----------|----------|----------|----------|----------|----------|----------|----------|
| 313 | 0.688556 | 0.740287 | 0.720715 | 0.789649 | 1.01025 | 1.12958 | 1.02471 | 0.899074 | 0.72646 | 0.612324 | 0.619396 | 0.62836 | 0.596432 | 0.549707 | 0.51669 | 0.503705 |
| 314 | 0.355441 | 0.614128 | 0.621062 | 0.682903 | 0.886939 | 0.97527 | 0.862266 | 0.742783 | 0.598249 | 0.535916 | 0.545138 | 0.549131 | 0.528346 | 0.497753 | 0.465095 | 0.441518 |
| 315 | 0.423379 | 0.757387 | 0.721402 | 0.589832 | 0.617605 | 0.727627 | 0.78797 | 0.84224 | 0.874813 | 0.887348 | 0.881372 | 0.862316 | 0.836464 | 0.803438 | 0.759939 | 0.712428 |
| 316 | 0.539957 | 0.663774 | 0.633855 | 0.771607 | 1.0026 | 1.06541 | 0.954316 | 0.842623 | 0.720922 | 0.640287 | 0.584756 | 0.520157 | 0.47026 | 0.460973 | 0.458352 | 0.447826 |
| 317 | 0.537079 | 0.910472 | 0.855654 | 0.707445 | 0.942458 | 1.14369 | 1.04752 | 0.920243 | 0.695716 | 0.491091 | 0.519067 | 0.534742 | 0.522106 | 0.472455 | 0.430047 | 0.414385 |
| 318 | 0.374619 | 0.555236 | 0.631076 | 0.871191 | 1.25917 | 1.41744 | 1.24988 | 1.05965 | 0.788104 | 0.618844 | 0.632925 | 0.620782 | 0.533531 | 0.432893 | 0.390363 | 0.38236 |
| 319 | 0.521599 | 0.588341 | 0.687961 | 0.775179 | 0.933367 | 1.08395 | 1.01167 | 0.902539 | 0.74033 | 0.625128 | 0.628453 | 0.635669 | 0.599583 | 0.547322 | 0.507374 | 0.479539 |
| 320 | 0.610544 | 0.658818 | 0.661199 | 0.666065 | 0.871333 | 1.01521 | 0.941933 | 0.864776 | 0.760267 | 0.681313 | 0.640573 | 0.602042 | 0.550798 | 0.49845 | 0.448717 | 0.403965 |
| 321 | 0.436171 | 0.673091 | 0.661434 | 0.630239 | 0.98662 | 1.22898 | 1.15508 | 1.0392 | 0.830741 | 0.574619 | 0.504383 | 0.457816 | 0.439345 | 0.430544 | 0.454794 | 0.479851 |
| 322 | 0.453996 | 0.622146 | 0.60414 | 0.628227 | 0.806682 | 0.933436 | 0.890509 | 0.819331 | 0.704747 | 0.59974 | 0.552837 | 0.529668 | 0.485015 | 0.420732 | 0.365135 | 0.346966 |
| 323 | 0.607488 | 0.672481 | 0.642293 | 0.733892 | 1.00526 | 1.14052 | 1.04695 | 0.936123 | 0.77644 | 0.630837 | 0.552089 | 0.504846 | 0.449364 | 0.411691 | 0.40657 | 0.40856 |
| 324 | 0.714701 | 0.678179 | 0.66345 | 0.838304 | 1.16523 | 1.31799 | 1.17369 | 0.996866 | 0.714088 | 0.564062 | 0.557704 | 0.560865 | 0.547176 | 0.510715 | 0.481791 | 0.458637 |
| 325 | 0.306482 | 0.571325 | 0.699847 | 0.839365 | 1.0674 | 1.1883 | 1.0693 | 0.930613 | 0.752688 | 0.654364 | 0.661142 | 0.645701 | 0.577079 | 0.490506 | 0.448154 | 0.458334 |
| 326 | 0.359359 | 0.558449 | 0.634303 | 0.667105 | 0.730679 | 0.79525 | 0.764211 | 0.739119 | 0.699446 | 0.645295 | 0.575163 | 0.506134 | 0.474191 | 0.473582 | 0.462966 | 0.438313 |
| 327 | 0.461942 | 0.552312 | 0.597627 | 0.698355 | 0.853021 | 0.882581 | 0.766274 | 0.644271 | 0.523981 | 0.518239 | 0.513493 | 0.497056 | 0.449878 | 0.396875 | 0.362526 | 0.356702 |
| 328 | 0.485922 | 0.523372 | 0.601922 | 0.828939 | 1.04933 | 1.12961 | 1.0209 | 0.878498 | 0.679777 | 0.524043 | 0.525899 | 0.535847 | 0.494522 | 0.43283 | 0.400167 | 0.41405 |
| 329 | 0.456229 | 0.537015 | 0.568034 | 0.600899 | 0.838487 | 0.954638 | 0.841355 | 0.733037 | 0.605052 | 0.558068 | 0.559501 | 0.561901 | 0.540666 | 0.504965 | 0.463644 | 0.439686 |
| 330 | 0.525286 | 0.672079 | 0.659879 | 0.635714 | 0.815659 | 0.924294 | 0.844906 | 0.757092 | 0.638421 | 0.560637 | 0.559509 | 0.570453 | 0.5557 | 0.513232 | 0.458159 | 0.435355 |
| 331 | 0.439169 | 0.575736 | 0.558946 | 0.620143 | 0.986737 | 1.17608 | 1.0626 | 0.918944 | 0.676257 | 0.441587 | 0.458222 | 0.513034 | 0.504927 | 0.471602 | 0.458596 | 0.473289 |
| 332 | 0.45559 | 0.537879 | 0.61293 | 0.69331 | 0.920717 | 1.06192 | 0.962656 | 0.845216 | 0.67791 | 0.563169 | 0.575262 | 0.592383 | 0.570179 | 0.529407 | 0.490874 | 0.467213 |
| 333 | 0.466142 | 0.629862 | 0.674419 | 0.712595 | 0.872077 | 0.979243 | 0.879404 | 0.765784 | 0.626352 | 0.593526 | 0.618267 | 0.618637 | 0.591744 | 0.555408 | 0.532645 | 0.518899 |
| 334 | 0.400409 | 0.643072 | 0.722988 | 0.789074 | 0.902124 | 0.93574 | 0.853853 | 0.787492 | 0.735082 | 0.702534 | 0.65721 | 0.582501 | 0.504911 | 0.479818 | 0.496657 | 0.506987 |
| 335 | 0.480677 | 0.582075 | 0.625063 | 0.775265 | 1.21569 | 1.41571 | 1.2598 | 1.08582 | 0.824749 | 0.634145 | 0.567978 | 0.539374 | 0.489663 | 0.46687 | 0.451914 | 0.435107 |
| 336 | 0.385971 | 0.54132 | 0.643025 | 0.93828 | 1.21905 | 1.27944 | 1.12251 | 0.93985 | 0.706057 | 0.582103 | 0.564416 | 0.543989 | 0.498557 | 0.469703 | 0.45592 | 0.439922 |
| 337 | 0.595331 | 0.701099 | 0.696818 | 0.905362 | 1.15727 | 1.19581 | 1.05958 | 0.91497 | 0.769575 | 0.7105 | 0.699769 | 0.661365 | 0.611189 | 0.633485 | 0.723444 | 0.797526 |
| 338 | 0.396064 | 0.494348 | 0.737613 | 0.913972 | 1.03489 | 1.12332 | 1.04324 | 0.929496 | 0.789909 | 0.728962 | 0.761356 | 0.77993 | 0.744522 | 0.666139 | 0.580625 | 0.547265 |
| 339 | 0.492962 | 0.583172 | 0.612725 | 0.662496 | 0.905438 | 1.06366 | 0.984487 | 0.896087 | 0.775987 | 0.696482 | 0.682446 | 0.680614 | 0.671642 | 0.675115 | 0.69583 | 0.709382 |
| 340 | 0.466343 | 0.628563 | 0.672379 | 0.729101 | 0.856624 | 0.898471 | 0.824557 | 0.768503 | 0.72619 | 0.704517 | 0.679991 | 0.651404 | 0.642772 | 0.658128 | 0.682429 | 0.71785 |
| 341 | 0.720109 | 0.900668 | 1.11185 | 1.31251 | 1.39925 | 1.33677 | 1.18691 | 1.00857 | 0.852723 | 0.772636 | 0.721209 | 0.654005 | 0.588735 | 0.551352 | 0.530349 | 0.521127 |
| 342 | 0.57553 | 0.621423 | 0.586105 | 0.726207 | 0.992304 | 1.0939 | 0.995009 | 0.884596 | 0.752011 | 0.680734 | 0.681067 | 0.696582 | 0.720132 | 0.748014 | 0.755834 | 0.733111 |
| 343 | 0.584483 | 0.63991 | 0.636554 | 0.947147 | 1.34872 | 1.4945 | 1.31565 | 1.10617 | 0.807628 | 0.706784 | 0.709387 | 0.709553 | 0.680091 | 0.685641 | 0.73126 | 0.767394 |
| 344 | 0.278721 | 0.538729 | 0.571164 | 0.621391 | 0.795658 | 0.875792 | 0.821498 | 0.804837 | 0.795579 | 0.779961 | 0.740689 | 0.697075 | 0.69133 | 0.71558 | 0.727223 | 0.712594 |
| 345 | 0.675061 | 0.73792 | 0.675724 | 0.686732 | 0.987152 | 1.17398 | 1.09148 | 0.981563 | 0.802268 | 0.614925 | 0.554831 | 0.498613 | 0.488759 | 0.479752 | 0.467807 | 0.447756 |