VTM Experiment Report

# Raw

Table from sheet 'Raw' in vtm\_report.xlsx

|  |  |  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| group | tool | seq | qp | bitrate\_kbps | psnr\_y | psnr\_u | psnr\_v | psnr\_yuv | enc\_time\_s | retcode | tool\_full |
| Performance | RDOQ\_off | BasketballPass\_416x240\_50 | 37 | 105.224 | 33.106 | 39.145 | 38.123 | 34.251 | 129.452 | 0 | Performance-RDOQ\_off |
| Performance | RDOQTS\_off | BasketballPass\_416x240\_50 | 37 | 104.849 | 33.186 | 39.118 | 38.288 | 34.327 | 130.702 | 0 | Performance-RDOQTS\_off |
| Speed | FDM | BasketballPass\_416x240\_50 | 37 | 100.642 | 33.098 | 39.114 | 38.123 | 34.244 | 139.896 | 0 | Speed-FDM |
| Baseline | nan | BasketballPass\_416x240\_50 | 37 | 100.642 | 33.098 | 39.114 | 38.123 | 34.244 | 140.639 | 0 | Baseline |
| Speed | FastSearch | BasketballPass\_416x240\_50 | 37 | 100.642 | 33.098 | 39.114 | 38.123 | 34.244 | 140.941 | 0 | Speed-FastSearch |
| Performance | Deblock\_off | BasketballPass\_416x240\_50 | 37 | 102.194 | 33.036 | 38.992 | 38.072 | 34.179 | 140.947 | 0 | Performance-Deblock\_off |
| Speed | FastMrg | BasketballPass\_416x240\_50 | 37 | 100.642 | 33.098 | 39.114 | 38.123 | 34.244 | 141.138 | 0 | Speed-FastMrg |
| Speed | LCTUFast | BasketballPass\_416x240\_50 | 37 | 100.642 | 33.098 | 39.114 | 38.123 | 34.244 | 141.856 | 0 | Speed-LCTUFast |
| Performance | SAO\_off | BasketballPass\_416x240\_50 | 37 | 101.636 | 33.062 | 39.069 | 38.178 | 34.211 | 143.123 | 0 | Performance-SAO\_off |
| Speed | FEN | BasketballPass\_416x240\_50 | 37 | 100.642 | 33.098 | 39.114 | 38.123 | 34.244 | 144.017 | 0 | Speed-FEN |
| Performance | RDOQ\_off | BasketballPass\_416x240\_50 | 32 | 194.897 | 35.918 | 41.264 | 40.282 | 36.962 | 180.449 | 0 | Performance-RDOQ\_off |
| Performance | RDOQTS\_off | BasketballPass\_416x240\_50 | 32 | 194.364 | 36.025 | 41.336 | 40.255 | 37.055 | 184.675 | 0 | Performance-RDOQTS\_off |
| Performance | Deblock\_off | BasketballPass\_416x240\_50 | 32 | 187.515 | 35.852 | 41.177 | 40.174 | 36.889 | 194.89 | 0 | Performance-Deblock\_off |
| Speed | FDM | BasketballPass\_416x240\_50 | 32 | 188.751 | 35.953 | 41.36 | 40.263 | 36.995 | 197.515 | 0 | Speed-FDM |
| Speed | FastSearch | BasketballPass\_416x240\_50 | 32 | 188.751 | 35.953 | 41.36 | 40.263 | 36.995 | 197.685 | 0 | Speed-FastSearch |
| Speed | FEN | BasketballPass\_416x240\_50 | 32 | 188.751 | 35.953 | 41.36 | 40.263 | 36.995 | 198.182 | 0 | Speed-FEN |
| Speed | LCTUFast | BasketballPass\_416x240\_50 | 32 | 188.751 | 35.953 | 41.36 | 40.263 | 36.995 | 199.031 | 0 | Speed-LCTUFast |
| Baseline | nan | BasketballPass\_416x240\_50 | 32 | 188.751 | 35.953 | 41.36 | 40.263 | 36.995 | 199.521 | 0 | Baseline |
| Speed | FastMrg | BasketballPass\_416x240\_50 | 32 | 188.751 | 35.953 | 41.36 | 40.263 | 36.995 | 200.101 | 0 | Speed-FastMrg |
| Performance | SAO\_off | BasketballPass\_416x240\_50 | 32 | 187.77 | 35.938 | 41.337 | 40.23 | 36.978 | 206.456 | 0 | Performance-SAO\_off |
| Performance | RDOQ\_off | BasketballPass\_416x240\_50 | 27 | 368.812 | 39.117 | 43.458 | 42.522 | 40.006 | 245.661 | 0 | Performance-RDOQ\_off |
| Performance | RDOQTS\_off | BasketballPass\_416x240\_50 | 27 | 370.23 | 39.257 | 43.598 | 42.737 | 40.152 | 260.793 | 0 | Performance-RDOQTS\_off |
| Speed | FEN | BasketballPass\_416x240\_50 | 27 | 356.388 | 39.164 | 43.528 | 42.689 | 40.065 | 285.742 | 0 | Speed-FEN |
| Speed | FastMrg | BasketballPass\_416x240\_50 | 27 | 356.388 | 39.164 | 43.528 | 42.689 | 40.065 | 286.285 | 0 | Speed-FastMrg |
| Speed | FDM | BasketballPass\_416x240\_50 | 27 | 356.388 | 39.164 | 43.528 | 42.689 | 40.065 | 286.468 | 0 | Speed-FDM |
| Speed | LCTUFast | BasketballPass\_416x240\_50 | 27 | 356.388 | 39.164 | 43.528 | 42.689 | 40.065 | 286.548 | 0 | Speed-LCTUFast |
| Baseline | nan | BasketballPass\_416x240\_50 | 27 | 356.388 | 39.164 | 43.528 | 42.689 | 40.065 | 286.713 | 0 | Baseline |
| Speed | FastSearch | BasketballPass\_416x240\_50 | 27 | 356.388 | 39.164 | 43.528 | 42.689 | 40.065 | 286.718 | 0 | Speed-FastSearch |
| Performance | SAO\_off | BasketballPass\_416x240\_50 | 27 | 356.388 | 39.175 | 43.46 | 42.787 | 40.077 | 287.041 | 0 | Performance-SAO\_off |
| Performance | Deblock\_off | BasketballPass\_416x240\_50 | 27 | 358.085 | 39.13 | 43.639 | 42.724 | 40.046 | 289.328 | 0 | Performance-Deblock\_off |
| Baseline | nan | BlowingBubbles\_416x240\_50 | 37 | 174.618 | 30.195 | 35.286 | 37.334 | 31.378 | 250.253 | 0 | Baseline |
| Performance | SAO\_off | BlowingBubbles\_416x240\_50 | 37 | 175.297 | 30.218 | 35.313 | 37.233 | 31.394 | 249.557 | 0 | Performance-SAO\_off |
| Baseline | nan | BasketballPass\_416x240\_50 | 22 | 687.515 | 42.794 | 46.224 | 45.633 | 43.555 | 406.392 | 0 | Baseline |
| Performance | SAO\_off | BasketballPass\_416x240\_50 | 22 | 686.703 | 42.772 | 46.192 | 45.658 | 43.536 | 410.439 | 0 | Performance-SAO\_off |
| Performance | RDOQ\_off | BlowingBubbles\_416x240\_50 | 37 | 182.727 | 30.267 | 35.341 | 37.197 | 31.437 | 231.1 | 0 | Performance-RDOQ\_off |
| Performance | Deblock\_off | BlowingBubbles\_416x240\_50 | 37 | 176.036 | 30.15 | 35.315 | 37.12 | 31.329 | 245.834 | 0 | Performance-Deblock\_off |
| Performance | RDOQTS\_off | BlowingBubbles\_416x240\_50 | 37 | 182.521 | 30.299 | 35.343 | 37.205 | 31.467 | 240.979 | 0 | Performance-RDOQTS\_off |
| Speed | FastSearch | BlowingBubbles\_416x240\_50 | 37 | 174.618 | 30.195 | 35.286 | 37.334 | 31.378 | 248.564 | 0 | Speed-FastSearch |
| Speed | FEN | BlowingBubbles\_416x240\_50 | 37 | 174.618 | 30.195 | 35.286 | 37.334 | 31.378 | 249.052 | 0 | Speed-FEN |
| Speed | LCTUFast | BlowingBubbles\_416x240\_50 | 37 | 174.618 | 30.195 | 35.286 | 37.334 | 31.378 | 248.685 | 0 | Speed-LCTUFast |
| Speed | FDM | BlowingBubbles\_416x240\_50 | 37 | 174.618 | 30.195 | 35.286 | 37.334 | 31.378 | 250.209 | 0 | Speed-FDM |
| Speed | FastMrg | BlowingBubbles\_416x240\_50 | 37 | 174.618 | 30.195 | 35.286 | 37.334 | 31.378 | 249.449 | 0 | Speed-FastMrg |
| Performance | RDOQ\_off | BasketballPass\_416x240\_50 | 22 | 707.673 | 42.59 | 46.031 | 45.451 | 43.357 | 336.039 | 0 | Performance-RDOQ\_off |
| Performance | RDOQTS\_off | BasketballPass\_416x240\_50 | 22 | 710.8 | 42.859 | 46.197 | 45.533 | 43.594 | 356.315 | 0 | Performance-RDOQTS\_off |
| Performance | Deblock\_off | BasketballPass\_416x240\_50 | 22 | 688.618 | 42.777 | 46.264 | 45.711 | 43.553 | 409.226 | 0 | Performance-Deblock\_off |
| Speed | FastSearch | BasketballPass\_416x240\_50 | 22 | 687.515 | 42.794 | 46.224 | 45.633 | 43.555 | 405.113 | 0 | Speed-FastSearch |
| Speed | FEN | BasketballPass\_416x240\_50 | 22 | 687.515 | 42.794 | 46.224 | 45.633 | 43.555 | 407.267 | 0 | Speed-FEN |
| Speed | FDM | BasketballPass\_416x240\_50 | 22 | 687.515 | 42.794 | 46.224 | 45.633 | 43.555 | 407.597 | 0 | Speed-FDM |
| Speed | LCTUFast | BasketballPass\_416x240\_50 | 22 | 687.515 | 42.794 | 46.224 | 45.633 | 43.555 | 407.254 | 0 | Speed-LCTUFast |
| Speed | FastMrg | BasketballPass\_416x240\_50 | 22 | 687.515 | 42.794 | 46.224 | 45.633 | 43.555 | 406.898 | 0 | Speed-FastMrg |
| Baseline | nan | BlowingBubbles\_416x240\_50 | 32 | 351.151 | 32.776 | 37.149 | 39.219 | 33.85 | 400.958 | 0 | Baseline |
| Performance | SAO\_off | BlowingBubbles\_416x240\_50 | 32 | 352.642 | 32.773 | 37.175 | 39.278 | 33.853 | 402.431 | 0 | Performance-SAO\_off |
| Performance | RDOQ\_off | BlowingBubbles\_416x240\_50 | 32 | 362.897 | 32.721 | 37.16 | 39.025 | 33.792 | 354.963 | 0 | Performance-RDOQ\_off |
| Performance | Deblock\_off | BlowingBubbles\_416x240\_50 | 32 | 351.612 | 32.72 | 37.11 | 39.03 | 33.79 | 395.885 | 0 | Performance-Deblock\_off |
| Performance | RDOQTS\_off | BlowingBubbles\_416x240\_50 | 32 | 366.752 | 32.853 | 37.238 | 39.139 | 33.922 | 378.709 | 0 | Performance-RDOQTS\_off |
| Speed | FEN | BlowingBubbles\_416x240\_50 | 32 | 351.151 | 32.776 | 37.149 | 39.219 | 33.85 | 403.125 | 0 | Speed-FEN |
| Speed | FastMrg | BlowingBubbles\_416x240\_50 | 32 | 351.151 | 32.776 | 37.149 | 39.219 | 33.85 | 403.792 | 0 | Speed-FastMrg |
| Speed | LCTUFast | BlowingBubbles\_416x240\_50 | 32 | 351.151 | 32.776 | 37.149 | 39.219 | 33.85 | 403.998 | 0 | Speed-LCTUFast |
| Speed | FastSearch | BlowingBubbles\_416x240\_50 | 32 | 351.151 | 32.776 | 37.149 | 39.219 | 33.85 | 405.069 | 0 | Speed-FastSearch |
| Speed | FDM | BlowingBubbles\_416x240\_50 | 32 | 351.151 | 32.776 | 37.149 | 39.219 | 33.85 | 405.709 | 0 | Speed-FDM |
| Performance | SAO\_off | BlowingBubbles\_416x240\_50 | 27 | 710.461 | 35.569 | 39.336 | 41.344 | 36.544 | 605.829 | 0 | Performance-SAO\_off |
| Baseline | nan | BlowingBubbles\_416x240\_50 | 27 | 710.412 | 35.586 | 39.333 | 41.355 | 36.562 | 619.537 | 0 | Baseline |
| Performance | RDOQ\_off | BlowingBubbles\_416x240\_50 | 27 | 728.848 | 35.461 | 39.208 | 41.286 | 36.437 | 517.709 | 0 | Performance-RDOQ\_off |
| Performance | RDOQTS\_off | BlowingBubbles\_416x240\_50 | 27 | 737.891 | 35.64 | 39.351 | 41.367 | 36.608 | 567.346 | 0 | Performance-RDOQTS\_off |
| Performance | Deblock\_off | BlowingBubbles\_416x240\_50 | 27 | 711.976 | 35.549 | 39.32 | 41.35 | 36.524 | 614.378 | 0 | Performance-Deblock\_off |
| Speed | FastSearch | BlowingBubbles\_416x240\_50 | 27 | 710.412 | 35.586 | 39.333 | 41.355 | 36.562 | 624.621 | 0 | Speed-FastSearch |
| Speed | FEN | BlowingBubbles\_416x240\_50 | 27 | 710.412 | 35.586 | 39.333 | 41.355 | 36.562 | 623.961 | 0 | Speed-FEN |
| Speed | FDM | BlowingBubbles\_416x240\_50 | 27 | 710.412 | 35.586 | 39.333 | 41.355 | 36.562 | 625.452 | 0 | Speed-FDM |
| Speed | LCTUFast | BlowingBubbles\_416x240\_50 | 27 | 710.412 | 35.586 | 39.333 | 41.355 | 36.562 | 624.246 | 0 | Speed-LCTUFast |
| Speed | FastMrg | BlowingBubbles\_416x240\_50 | 27 | 710.412 | 35.586 | 39.333 | 41.355 | 36.562 | 622.556 | 0 | Speed-FastMrg |
| Performance | RDOQ\_off | BlowingBubbles\_416x240\_50 | 22 | 1532.206 | 38.447 | 41.655 | 43.818 | 39.351 | 697.387 | 0 | Performance-RDOQ\_off |
| Performance | RDOQTS\_off | BlowingBubbles\_416x240\_50 | 22 | 1553.891 | 38.698 | 41.808 | 43.979 | 39.586 | 758.441 | 0 | Performance-RDOQTS\_off |
| Performance | Deblock\_off | BlowingBubbles\_416x240\_50 | 22 | 1503.406 | 38.68 | 41.866 | 43.917 | 39.572 | 844.361 | 0 | Performance-Deblock\_off |
| Performance | SAO\_off | BlowingBubbles\_416x240\_50 | 22 | 1504.376 | 38.699 | 41.853 | 43.947 | 39.592 | 872.6 | 0 | Performance-SAO\_off |
| Baseline | nan | BlowingBubbles\_416x240\_50 | 22 | 1503.83 | 38.688 | 41.855 | 43.985 | 39.586 | 876.165 | 0 | Baseline |
| Speed | FastSearch | BlowingBubbles\_416x240\_50 | 22 | 1503.83 | 38.688 | 41.855 | 43.985 | 39.586 | 879.486 | 0 | Speed-FastSearch |
| Speed | FEN | BlowingBubbles\_416x240\_50 | 22 | 1503.83 | 38.688 | 41.855 | 43.985 | 39.586 | 877.264 | 0 | Speed-FEN |
| Speed | LCTUFast | BlowingBubbles\_416x240\_50 | 22 | 1503.83 | 38.688 | 41.855 | 43.985 | 39.586 | 878.155 | 0 | Speed-LCTUFast |
| Speed | FDM | BlowingBubbles\_416x240\_50 | 22 | 1503.83 | 38.688 | 41.855 | 43.985 | 39.586 | 881.754 | 0 | Speed-FDM |
| Speed | FastMrg | BlowingBubbles\_416x240\_50 | 22 | 1503.83 | 38.688 | 41.855 | 43.985 | 39.586 | 882.297 | 0 | Speed-FastMrg |
| Performance | RDOQ\_off | BasketballDrill\_832x480\_50 | 37 | 1572.012 | 30.062 | 31.122 | 31.531 | 30.354 | 2121.958 | 0 | Performance-RDOQ\_off |
| Performance | RDOQTS\_off | BasketballDrill\_832x480\_50 | 37 | 1625.685 | 30.201 | 31.386 | 31.933 | 30.548 | 2266.668 | 0 | Performance-RDOQTS\_off |
| Performance | SAO\_off | BasketballDrill\_832x480\_50 | 37 | 1571.867 | 30.079 | 31.367 | 31.908 | 30.451 | 2381.432 | 0 | Performance-SAO\_off |
| Performance | Deblock\_off | BasketballDrill\_832x480\_50 | 37 | 1568.097 | 30.005 | 31.315 | 31.846 | 30.381 | 2329.945 | 0 | Performance-Deblock\_off |
| Baseline | nan | BasketballDrill\_832x480\_50 | 37 | 1575.018 | 30.09 | 31.362 | 31.916 | 30.462 | 2383.527 | 0 | Baseline |
| Speed | FastSearch | BasketballDrill\_832x480\_50 | 37 | 1575.018 | 30.09 | 31.362 | 31.916 | 30.462 | 2370.921 | 0 | Speed-FastSearch |
| Speed | FEN | BasketballDrill\_832x480\_50 | 37 | 1575.018 | 30.09 | 31.362 | 31.916 | 30.462 | 2375.413 | 0 | Speed-FEN |
| Speed | FDM | BasketballDrill\_832x480\_50 | 37 | 1575.018 | 30.09 | 31.362 | 31.916 | 30.462 | 2374.887 | 0 | Speed-FDM |
| Speed | FastMrg | BasketballDrill\_832x480\_50 | 37 | 1575.018 | 30.09 | 31.362 | 31.916 | 30.462 | 2377.647 | 0 | Speed-FastMrg |
| Speed | LCTUFast | BasketballDrill\_832x480\_50 | 37 | 1575.018 | 30.09 | 31.362 | 31.916 | 30.462 | 2380.163 | 0 | Speed-LCTUFast |
| Performance | RDOQ\_off | BasketballDrill\_832x480\_50 | 32 | 3034.012 | 32.954 | 33.41 | 33.712 | 33.039 | 2561.078 | 0 | Performance-RDOQ\_off |
| Performance | RDOQTS\_off | BasketballDrill\_832x480\_50 | 32 | 3136.642 | 33.149 | 33.808 | 34.185 | 33.308 | 2835.759 | 0 | Performance-RDOQTS\_off |
| Baseline | nan | BasketballDrill\_832x480\_50 | 32 | 3042.327 | 33.042 | 33.81 | 34.229 | 33.237 | 3211.629 | 0 | Baseline |
| Performance | SAO\_off | BasketballDrill\_832x480\_50 | 32 | 3042.085 | 33.031 | 33.8 | 34.219 | 33.228 | 3212.091 | 0 | Performance-SAO\_off |
| Performance | Deblock\_off | BasketballDrill\_832x480\_50 | 32 | 3046.352 | 33.018 | 33.771 | 34.149 | 33.203 | 3169.609 | 0 | Performance-Deblock\_off |
| Speed | FastSearch | BasketballDrill\_832x480\_50 | 32 | 3042.327 | 33.042 | 33.81 | 34.229 | 33.237 | 3217.534 | 0 | Speed-FastSearch |
| Speed | FEN | BasketballDrill\_832x480\_50 | 32 | 3042.327 | 33.042 | 33.81 | 34.229 | 33.237 | 3209.731 | 0 | Speed-FEN |
| Speed | FDM | BasketballDrill\_832x480\_50 | 32 | 3042.327 | 33.042 | 33.81 | 34.229 | 33.237 | 3213.98 | 0 | Speed-FDM |
| Speed | LCTUFast | BasketballDrill\_832x480\_50 | 32 | 3042.327 | 33.042 | 33.81 | 34.229 | 33.237 | 3210.764 | 0 | Speed-LCTUFast |
| Speed | FastMrg | BasketballDrill\_832x480\_50 | 32 | 3042.327 | 33.042 | 33.81 | 34.229 | 33.237 | 3213.356 | 0 | Speed-FastMrg |
| Performance | RDOQ\_off | BasketballDrill\_832x480\_50 | 27 | 5699.382 | 36.301 | 35.777 | 35.925 | 35.998 | 3148.579 | 0 | Performance-RDOQ\_off |
| Performance | RDOQTS\_off | BasketballDrill\_832x480\_50 | 27 | 5876.267 | 36.57 | 36.233 | 36.495 | 36.356 | 3477.733 | 0 | Performance-RDOQTS\_off |
| Performance | Deblock\_off | BasketballDrill\_832x480\_50 | 27 | 5725.915 | 36.45 | 36.3 | 36.564 | 36.295 | 3803.32 | 0 | Performance-Deblock\_off |
| Baseline | nan | BasketballDrill\_832x480\_50 | 27 | 5723.406 | 36.492 | 36.3 | 36.609 | 36.335 | 3919.861 | 0 | Baseline |
| Performance | SAO\_off | BasketballDrill\_832x480\_50 | 27 | 5721.782 | 36.486 | 36.289 | 36.586 | 36.327 | 3912.641 | 0 | Performance-SAO\_off |
| Speed | FEN | BasketballDrill\_832x480\_50 | 27 | 5723.406 | 36.492 | 36.3 | 36.609 | 36.335 | 3915.164 | 0 | Speed-FEN |
| Speed | FastSearch | BasketballDrill\_832x480\_50 | 27 | 5723.406 | 36.492 | 36.3 | 36.609 | 36.335 | 3924.145 | 0 | Speed-FastSearch |
| Speed | FDM | BasketballDrill\_832x480\_50 | 27 | 5723.406 | 36.492 | 36.3 | 36.609 | 36.335 | 3917.093 | 0 | Speed-FDM |
| Speed | LCTUFast | BasketballDrill\_832x480\_50 | 27 | 5723.406 | 36.492 | 36.3 | 36.609 | 36.335 | 3912.009 | 0 | Speed-LCTUFast |
| Speed | FastMrg | BasketballDrill\_832x480\_50 | 27 | 5723.406 | 36.492 | 36.3 | 36.609 | 36.335 | 3931.677 | 0 | Speed-FastMrg |
| Baseline | nan | BasketballDrive\_1920x1080\_50 | 37 | 966.994 | 35.913 | 41.662 | 41.388 | 37.09 | 3049.644 | 0 | Baseline |
| Performance | SAO\_off | BasketballDrive\_1920x1080\_50 | 37 | 969.442 | 35.913 | 41.694 | 41.408 | 37.093 | 3071.631 | 0 | Performance-SAO\_off |
| Performance | Deblock\_off | BasketballDrive\_1920x1080\_50 | 37 | 971.115 | 35.823 | 41.548 | 41.247 | 36.995 | 3039.55 | 0 | Performance-Deblock\_off |
| Performance | RDOQ\_off | BasketballDrive\_1920x1080\_50 | 37 | 998.436 | 35.865 | 41.704 | 41.357 | 37.047 | 3000.829 | 0 | Performance-RDOQ\_off |
| Performance | SAO\_off | BasketballDrill\_832x480\_50 | 22 | 11410.449 | 40.667 | 40.211 | 40.526 | 40.463 | 5322.178 | 0 | Performance-SAO\_off |
| Baseline | nan | BasketballDrill\_832x480\_50 | 22 | 11419.188 | 40.662 | 40.219 | 40.525 | 40.46 | 5326.684 | 0 | Baseline |
| Performance | RDOQ\_off | BasketballDrill\_832x480\_50 | 22 | 11334.933 | 40.331 | 39.483 | 39.647 | 39.95 | 4004.558 | 0 | Performance-RDOQ\_off |
| Speed | FastSearch | BasketballDrive\_1920x1080\_50 | 37 | 966.994 | 35.913 | 41.662 | 41.388 | 37.09 | 3053.267 | 0 | Speed-FastSearch |
| Performance | RDOQTS\_off | BasketballDrive\_1920x1080\_50 | 37 | 1007.297 | 35.974 | 41.771 | 41.465 | 37.155 | 3103.744 | 0 | Performance-RDOQTS\_off |
| Speed | FEN | BasketballDrive\_1920x1080\_50 | 37 | 966.994 | 35.913 | 41.662 | 41.388 | 37.09 | 3048.722 | 0 | Speed-FEN |
| Speed | FDM | BasketballDrive\_1920x1080\_50 | 37 | 966.994 | 35.913 | 41.662 | 41.388 | 37.09 | 3056.478 | 0 | Speed-FDM |
| Speed | LCTUFast | BasketballDrive\_1920x1080\_50 | 37 | 966.994 | 35.913 | 41.662 | 41.388 | 37.09 | 3041.984 | 0 | Speed-LCTUFast |
| Speed | FastMrg | BasketballDrive\_1920x1080\_50 | 37 | 966.994 | 35.913 | 41.662 | 41.388 | 37.09 | 3058.085 | 0 | Speed-FastMrg |
| Performance | RDOQTS\_off | BasketballDrill\_832x480\_50 | 22 | 11652.982 | 40.698 | 40.013 | 40.321 | 40.409 | 4549.09 | 0 | Performance-RDOQTS\_off |
| Performance | Deblock\_off | BasketballDrill\_832x480\_50 | 22 | 11407.224 | 40.655 | 40.267 | 40.53 | 40.462 | 5164.316 | 0 | Performance-Deblock\_off |
| Speed | FEN | BasketballDrill\_832x480\_50 | 22 | 11419.188 | 40.662 | 40.219 | 40.525 | 40.46 | 5324.667 | 0 | Speed-FEN |
| Speed | FastSearch | BasketballDrill\_832x480\_50 | 22 | 11419.188 | 40.662 | 40.219 | 40.525 | 40.46 | 5329.017 | 0 | Speed-FastSearch |
| Speed | FDM | BasketballDrill\_832x480\_50 | 22 | 11419.188 | 40.662 | 40.219 | 40.525 | 40.46 | 5340.714 | 0 | Speed-FDM |
| Speed | LCTUFast | BasketballDrill\_832x480\_50 | 22 | 11419.188 | 40.662 | 40.219 | 40.525 | 40.46 | 5333.585 | 0 | Speed-LCTUFast |
| Speed | FastMrg | BasketballDrill\_832x480\_50 | 22 | 11419.188 | 40.662 | 40.219 | 40.525 | 40.46 | 5323.23 | 0 | Speed-FastMrg |
| Performance | SAO\_off | BasketballDrive\_1920x1080\_50 | 32 | 1807.77 | 37.624 | 42.99 | 43.334 | 38.8 | 5104.512 | 0 | Performance-SAO\_off |
| Baseline | nan | BasketballDrive\_1920x1080\_50 | 32 | 1812.764 | 37.634 | 42.983 | 43.336 | 38.809 | 5120.349 | 0 | Baseline |
| Performance | Deblock\_off | BasketballDrive\_1920x1080\_50 | 32 | 1807.345 | 37.569 | 42.937 | 43.204 | 38.74 | 5086.56 | 0 | Performance-Deblock\_off |
| Performance | RDOQ\_off | BasketballDrive\_1920x1080\_50 | 32 | 1865.733 | 37.561 | 42.99 | 43.267 | 38.74 | 4862.106 | 0 | Performance-RDOQ\_off |
| Performance | RDOQTS\_off | BasketballDrive\_1920x1080\_50 | 32 | 1875.988 | 37.678 | 43.02 | 43.365 | 38.852 | 5142.013 | 0 | Performance-RDOQTS\_off |
| Speed | FEN | BasketballDrive\_1920x1080\_50 | 32 | 1812.764 | 37.634 | 42.983 | 43.336 | 38.809 | 5153.407 | 0 | Speed-FEN |
| Speed | FastSearch | BasketballDrive\_1920x1080\_50 | 32 | 1812.764 | 37.634 | 42.983 | 43.336 | 38.809 | 5171.538 | 0 | Speed-FastSearch |
| Baseline | nan | BQTerrace\_1920x1080\_60 | 37 | 1370.298 | 32.399 | 38.419 | 40.735 | 33.742 | 1918.98 | 0 | Baseline |
| Performance | SAO\_off | BQTerrace\_1920x1080\_60 | 37 | 1364.189 | 32.386 | 38.417 | 40.744 | 33.73 | 1942.007 | 0 | Performance-SAO\_off |
| Speed | FDM | BasketballDrive\_1920x1080\_50 | 32 | 1812.764 | 37.634 | 42.983 | 43.336 | 38.809 | 5159.841 | 0 | Speed-FDM |
| Speed | LCTUFast | BasketballDrive\_1920x1080\_50 | 32 | 1812.764 | 37.634 | 42.983 | 43.336 | 38.809 | 5157.783 | 0 | Speed-LCTUFast |
| Speed | FastMrg | BasketballDrive\_1920x1080\_50 | 32 | 1812.764 | 37.634 | 42.983 | 43.336 | 38.809 | 5142.366 | 0 | Speed-FastMrg |
| Performance | RDOQ\_off | BQTerrace\_1920x1080\_60 | 37 | 1453.76 | 32.471 | 38.54 | 40.897 | 33.819 | 1831.335 | 0 | Performance-RDOQ\_off |
| Performance | Deblock\_off | BQTerrace\_1920x1080\_60 | 37 | 1363.069 | 32.376 | 38.352 | 40.672 | 33.715 | 1883.53 | 0 | Performance-Deblock\_off |
| Performance | RDOQTS\_off | BQTerrace\_1920x1080\_60 | 37 | 1427.491 | 32.478 | 38.476 | 40.74 | 33.816 | 1876.473 | 0 | Performance-RDOQTS\_off |
| Speed | FastSearch | BQTerrace\_1920x1080\_60 | 37 | 1370.298 | 32.399 | 38.419 | 40.735 | 33.742 | 1925.043 | 0 | Speed-FastSearch |
| Speed | FEN | BQTerrace\_1920x1080\_60 | 37 | 1370.298 | 32.399 | 38.419 | 40.735 | 33.742 | 1933.561 | 0 | Speed-FEN |
| Speed | FDM | BQTerrace\_1920x1080\_60 | 37 | 1370.298 | 32.399 | 38.419 | 40.735 | 33.742 | 1930.123 | 0 | Speed-FDM |
| Speed | LCTUFast | BQTerrace\_1920x1080\_60 | 37 | 1370.298 | 32.399 | 38.419 | 40.735 | 33.742 | 1931.256 | 0 | Speed-LCTUFast |
| Speed | FastMrg | BQTerrace\_1920x1080\_60 | 37 | 1370.298 | 32.399 | 38.419 | 40.735 | 33.742 | 1926.522 | 0 | Speed-FastMrg |
| Performance | RDOQ\_off | BQTerrace\_1920x1080\_60 | 32 | 2871.796 | 34.231 | 40.64 | 43.023 | 35.603 | 2638.258 | 0 | Performance-RDOQ\_off |
| Baseline | nan | BQTerrace\_1920x1080\_60 | 32 | 2750.516 | 34.227 | 40.516 | 42.93 | 35.59 | 2916.191 | 0 | Baseline |
| Performance | Deblock\_off | BQTerrace\_1920x1080\_60 | 32 | 2742.793 | 34.214 | 40.478 | 42.879 | 35.574 | 2884.866 | 0 | Performance-Deblock\_off |
| Performance | SAO\_off | BQTerrace\_1920x1080\_60 | 32 | 2739.825 | 34.215 | 40.529 | 42.887 | 35.578 | 2922.554 | 0 | Performance-SAO\_off |
| Baseline | nan | BasketballDrive\_1920x1080\_50 | 27 | 3542.303 | 38.977 | 44.217 | 45.093 | 40.174 | 8331.329 | 0 | Baseline |
| Performance | RDOQ\_off | BasketballDrive\_1920x1080\_50 | 27 | 3650.97 | 38.905 | 44.139 | 44.979 | 40.099 | 7575.059 | 0 | Performance-RDOQ\_off |
| Performance | SAO\_off | BasketballDrive\_1920x1080\_50 | 27 | 3536.618 | 38.978 | 44.227 | 45.105 | 40.176 | 8375.957 | 0 | Performance-SAO\_off |
| Performance | RDOQTS\_off | BQTerrace\_1920x1080\_60 | 32 | 2856.305 | 34.269 | 40.549 | 42.973 | 35.632 | 2770.421 | 0 | Performance-RDOQTS\_off |
| Speed | FastSearch | BQTerrace\_1920x1080\_60 | 32 | 2750.516 | 34.227 | 40.516 | 42.93 | 35.59 | 2891.263 | 0 | Speed-FastSearch |
| Speed | FEN | BQTerrace\_1920x1080\_60 | 32 | 2750.516 | 34.227 | 40.516 | 42.93 | 35.59 | 2892.311 | 0 | Speed-FEN |
| Performance | Deblock\_off | BasketballDrive\_1920x1080\_50 | 27 | 3534.339 | 38.946 | 44.161 | 45.033 | 40.139 | 8232.582 | 0 | Performance-Deblock\_off |
| Speed | FDM | BQTerrace\_1920x1080\_60 | 32 | 2750.516 | 34.227 | 40.516 | 42.93 | 35.59 | 2880.229 | 0 | Speed-FDM |
| Performance | RDOQTS\_off | BasketballDrive\_1920x1080\_50 | 27 | 3665.103 | 39.005 | 44.22 | 45.137 | 40.202 | 8185.564 | 0 | Performance-RDOQTS\_off |
| Speed | LCTUFast | BQTerrace\_1920x1080\_60 | 32 | 2750.516 | 34.227 | 40.516 | 42.93 | 35.59 | 2896.424 | 0 | Speed-LCTUFast |
| Speed | FastMrg | BQTerrace\_1920x1080\_60 | 32 | 2750.516 | 34.227 | 40.516 | 42.93 | 35.59 | 2882.99 | 0 | Speed-FastMrg |
| Speed | FastSearch | BasketballDrive\_1920x1080\_50 | 27 | 3542.303 | 38.977 | 44.217 | 45.093 | 40.174 | 8306.746 | 0 | Speed-FastSearch |
| Speed | FEN | BasketballDrive\_1920x1080\_50 | 27 | 3542.303 | 38.977 | 44.217 | 45.093 | 40.174 | 8313.482 | 0 | Speed-FEN |
| Speed | FDM | BasketballDrive\_1920x1080\_50 | 27 | 3542.303 | 38.977 | 44.217 | 45.093 | 40.174 | 8318.003 | 0 | Speed-FDM |
| Speed | LCTUFast | BasketballDrive\_1920x1080\_50 | 27 | 3542.303 | 38.977 | 44.217 | 45.093 | 40.174 | 8301.571 | 0 | Speed-LCTUFast |
| Speed | FastMrg | BasketballDrive\_1920x1080\_50 | 27 | 3542.303 | 38.977 | 44.217 | 45.093 | 40.174 | 8293.173 | 0 | Speed-FastMrg |
| Baseline | nan | BQTerrace\_1920x1080\_60 | 27 | 6128.538 | 35.727 | 41.859 | 44.171 | 37.062 | 5100.95 | 0 | Baseline |
| Performance | SAO\_off | BQTerrace\_1920x1080\_60 | 27 | 6097.644 | 35.712 | 41.85 | 44.162 | 37.048 | 5082.962 | 0 | Performance-SAO\_off |
| Performance | RDOQ\_off | BQTerrace\_1920x1080\_60 | 27 | 6387.52 | 35.692 | 41.949 | 44.265 | 37.038 | 4510.531 | 0 | Performance-RDOQ\_off |
| Performance | RDOQTS\_off | BQTerrace\_1920x1080\_60 | 27 | 6361.847 | 35.746 | 41.905 | 44.214 | 37.083 | 4675.197 | 0 | Performance-RDOQTS\_off |
| Performance | Deblock\_off | BQTerrace\_1920x1080\_60 | 27 | 6115.578 | 35.718 | 41.856 | 44.128 | 37.053 | 4939.11 | 0 | Performance-Deblock\_off |
| Speed | FastSearch | BQTerrace\_1920x1080\_60 | 27 | 6128.538 | 35.727 | 41.859 | 44.171 | 37.062 | 4988.797 | 0 | Speed-FastSearch |
| Speed | FEN | BQTerrace\_1920x1080\_60 | 27 | 6128.538 | 35.727 | 41.859 | 44.171 | 37.062 | 4965.692 | 0 | Speed-FEN |
| Performance | RDOQ\_off | BasketballDrive\_1920x1080\_50 | 22 | 8120.836 | 39.864 | 45.183 | 46.771 | 41.105 | 11384.697 | 0 | Performance-RDOQ\_off |
| Speed | FDM | BQTerrace\_1920x1080\_60 | 27 | 6128.538 | 35.727 | 41.859 | 44.171 | 37.062 | 4956.95 | 0 | Speed-FDM |
| Speed | LCTUFast | BQTerrace\_1920x1080\_60 | 27 | 6128.538 | 35.727 | 41.859 | 44.171 | 37.062 | 4956.872 | 0 | Speed-LCTUFast |
| Speed | FastMrg | BQTerrace\_1920x1080\_60 | 27 | 6128.538 | 35.727 | 41.859 | 44.171 | 37.062 | 4920.48 | 0 | Speed-FastMrg |
| Performance | RDOQTS\_off | BasketballDrive\_1920x1080\_50 | 22 | 8129.903 | 39.944 | 45.251 | 46.9 | 41.187 | 12455.456 | 0 | Performance-RDOQTS\_off |
| Baseline | nan | BasketballDrive\_1920x1080\_50 | 22 | 7908.024 | 39.94 | 45.23 | 46.891 | 41.181 | 13133.456 | 0 | Baseline |
| Performance | Deblock\_off | BasketballDrive\_1920x1080\_50 | 22 | 7916.388 | 39.931 | 45.212 | 46.864 | 41.171 | 12957.673 | 0 | Performance-Deblock\_off |
| Performance | SAO\_off | BasketballDrive\_1920x1080\_50 | 22 | 7881.794 | 39.939 | 45.231 | 46.888 | 41.18 | 13142.665 | 0 | Performance-SAO\_off |
| Speed | FastSearch | BasketballDrive\_1920x1080\_50 | 22 | 7908.024 | 39.94 | 45.23 | 46.891 | 41.181 | 13065.923 | 0 | Speed-FastSearch |
| Speed | FEN | BasketballDrive\_1920x1080\_50 | 22 | 7908.024 | 39.94 | 45.23 | 46.891 | 41.181 | 13014.236 | 0 | Speed-FEN |
| Speed | LCTUFast | BasketballDrive\_1920x1080\_50 | 22 | 7908.024 | 39.94 | 45.23 | 46.891 | 41.181 | 12940.71 | 0 | Speed-LCTUFast |
| Speed | FDM | BasketballDrive\_1920x1080\_50 | 22 | 7908.024 | 39.94 | 45.23 | 46.891 | 41.181 | 12980.227 | 0 | Speed-FDM |
| Speed | FastMrg | BasketballDrive\_1920x1080\_50 | 22 | 7908.024 | 39.94 | 45.23 | 46.891 | 41.181 | 12933.675 | 0 | Speed-FastMrg |
| Performance | RDOQ\_off | BQTerrace\_1920x1080\_60 | 22 | 25852.495 | 37.64 | 43.086 | 45.348 | 38.855 | 9805.824 | 0 | Performance-RDOQ\_off |
| Performance | RDOQTS\_off | BQTerrace\_1920x1080\_60 | 22 | 26899.942 | 37.773 | 43.078 | 45.337 | 38.959 | 10279.918 | 0 | Performance-RDOQTS\_off |
| Performance | Deblock\_off | BQTerrace\_1920x1080\_60 | 22 | 26194.734 | 37.797 | 43.081 | 45.335 | 38.978 | 11497.206 | 0 | Performance-Deblock\_off |
| Baseline | nan | BQTerrace\_1920x1080\_60 | 22 | 26168.465 | 37.795 | 43.063 | 45.323 | 38.976 | 11731.697 | 0 | Baseline |
| Performance | SAO\_off | BQTerrace\_1920x1080\_60 | 22 | 26159.433 | 37.796 | 43.063 | 45.329 | 38.976 | 11733.64 | 0 | Performance-SAO\_off |
| Speed | FastSearch | BQTerrace\_1920x1080\_60 | 22 | 26168.465 | 37.795 | 43.063 | 45.323 | 38.976 | 11395.817 | 0 | Speed-FastSearch |
| Speed | FEN | BQTerrace\_1920x1080\_60 | 22 | 26168.465 | 37.795 | 43.063 | 45.323 | 38.976 | 11371.065 | 0 | Speed-FEN |
| Speed | FDM | BQTerrace\_1920x1080\_60 | 22 | 26168.465 | 37.795 | 43.063 | 45.323 | 38.976 | 11330.16 | 0 | Speed-FDM |
| Speed | LCTUFast | BQTerrace\_1920x1080\_60 | 22 | 26168.465 | 37.795 | 43.063 | 45.323 | 38.976 | 11330.621 | 0 | Speed-LCTUFast |
| Speed | FastMrg | BQTerrace\_1920x1080\_60 | 22 | 26168.465 | 37.795 | 43.063 | 45.323 | 38.976 | 11330.005 | 0 | Speed-FastMrg |

# BD-Rate

Table from sheet 'BD-Rate' in vtm\_report.xlsx

|  |  |  |  |
| --- | --- | --- | --- |
| seq | group | tool | BD-Rate\_% |
| BQTerrace\_1920x1080\_60 | Performance | Deblock\_off | 0.3210558353346604 |
| BQTerrace\_1920x1080\_60 | Performance | RDOQTS\_off | 2.414378136926354 |
| BQTerrace\_1920x1080\_60 | Performance | RDOQ\_off | 5.346447833537682 |
| BQTerrace\_1920x1080\_60 | Performance | SAO\_off | 0.1832645254727927 |
| BQTerrace\_1920x1080\_60 | Speed | FDM | 2.433608869978343e-11 |
| BQTerrace\_1920x1080\_60 | Speed | FEN | 0.0 |
| BQTerrace\_1920x1080\_60 | Speed | FastMrg | 0.0 |
| BQTerrace\_1920x1080\_60 | Speed | FastSearch | 0.0 |
| BQTerrace\_1920x1080\_60 | Speed | LCTUFast | 0.0 |
| BasketballDrill\_832x480\_50 | Performance | Deblock\_off | 0.7829795329884481 |
| BasketballDrill\_832x480\_50 | Performance | RDOQTS\_off | 2.001014948486146 |
| BasketballDrill\_832x480\_50 | Performance | RDOQ\_off | 5.405206463108714 |
| BasketballDrill\_832x480\_50 | Performance | SAO\_off | 0.09737965756515532 |
| BasketballDrill\_832x480\_50 | Speed | FDM | 0.0 |
| BasketballDrill\_832x480\_50 | Speed | FEN | 0.0 |
| BasketballDrill\_832x480\_50 | Speed | FastMrg | 0.0 |
| BasketballDrill\_832x480\_50 | Speed | FastSearch | 0.0 |
| BasketballDrill\_832x480\_50 | Speed | LCTUFast | 0.0 |
| BasketballDrive\_1920x1080\_50 | Performance | Deblock\_off | 2.390184049538768 |
| BasketballDrive\_1920x1080\_50 | Performance | RDOQTS\_off | 1.749252211633467 |
| BasketballDrive\_1920x1080\_50 | Performance | RDOQ\_off | 6.683411371357351 |
| BasketballDrive\_1920x1080\_50 | Performance | SAO\_off | -0.03613415785106433 |
| BasketballDrive\_1920x1080\_50 | Speed | FDM | 0.0 |
| BasketballDrive\_1920x1080\_50 | Speed | FEN | 0.0 |
| BasketballDrive\_1920x1080\_50 | Speed | FastMrg | 0.0 |
| BasketballDrive\_1920x1080\_50 | Speed | FastSearch | 0.0 |
| BasketballDrive\_1920x1080\_50 | Speed | LCTUFast | 0.0 |
| BasketballPass\_416x240\_50 | Performance | Deblock\_off | 1.266161000450494 |
| BasketballPass\_416x240\_50 | Performance | RDOQTS\_off | 2.040716266141107 |
| BasketballPass\_416x240\_50 | Performance | RDOQ\_off | 4.699725807599409 |
| BasketballPass\_416x240\_50 | Performance | SAO\_off | 0.08659458340578574 |
| BasketballPass\_416x240\_50 | Speed | FDM | 0.0 |
| BasketballPass\_416x240\_50 | Speed | FEN | 0.0 |
| BasketballPass\_416x240\_50 | Speed | FastMrg | 0.0 |
| BasketballPass\_416x240\_50 | Speed | FastSearch | 0.0 |
| BasketballPass\_416x240\_50 | Speed | LCTUFast | 0.0 |
| BlowingBubbles\_416x240\_50 | Performance | Deblock\_off | 1.377508423827734 |
| BlowingBubbles\_416x240\_50 | Performance | RDOQTS\_off | 2.57798489586174 |
| BlowingBubbles\_416x240\_50 | Performance | RDOQ\_off | 5.499232289790679 |
| BlowingBubbles\_416x240\_50 | Performance | SAO\_off | 0.2816273853986528 |
| BlowingBubbles\_416x240\_50 | Speed | FDM | 0.0 |
| BlowingBubbles\_416x240\_50 | Speed | FEN | 0.0 |
| BlowingBubbles\_416x240\_50 | Speed | FastMrg | 0.0 |
| BlowingBubbles\_416x240\_50 | Speed | FastSearch | 0.0 |
| BlowingBubbles\_416x240\_50 | Speed | LCTUFast | 0.0 |

# TimeTable

Table from sheet 'TimeTable' in vtm\_report.xlsx

|  |  |  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| seq | qp | Baseline | Performance-Deblock\_off | Performance-RDOQTS\_off | Performance-RDOQ\_off | Performance-SAO\_off | Speed-FDM | Speed-FEN | Speed-FastMrg | Speed-FastSearch | Speed-LCTUFast |
| BQTerrace\_1920x1080\_60 | 22 | 11731.697 | 11497.206 | 10279.918 | 9805.824 | 11733.64 | 11330.16 | 11371.065 | 11330.005 | 11395.817 | 11330.621 |
| BQTerrace\_1920x1080\_60 | 27 | 5100.95 | 4939.11 | 4675.197 | 4510.531 | 5082.962 | 4956.95 | 4965.692 | 4920.48 | 4988.797 | 4956.872 |
| BQTerrace\_1920x1080\_60 | 32 | 2916.191 | 2884.866 | 2770.421 | 2638.258 | 2922.554 | 2880.229 | 2892.311 | 2882.99 | 2891.263 | 2896.424 |
| BQTerrace\_1920x1080\_60 | 37 | 1918.98 | 1883.53 | 1876.473 | 1831.335 | 1942.007 | 1930.123 | 1933.561 | 1926.522 | 1925.043 | 1931.256 |
| BasketballDrill\_832x480\_50 | 22 | 5326.684 | 5164.316 | 4549.09 | 4004.558 | 5322.178 | 5340.714 | 5324.667 | 5323.23 | 5329.017 | 5333.585 |
| BasketballDrill\_832x480\_50 | 27 | 3919.861 | 3803.32 | 3477.733 | 3148.579 | 3912.641 | 3917.093 | 3915.164 | 3931.677 | 3924.145 | 3912.009 |
| BasketballDrill\_832x480\_50 | 32 | 3211.629 | 3169.609 | 2835.759 | 2561.078 | 3212.091 | 3213.98 | 3209.731 | 3213.356 | 3217.534 | 3210.764 |
| BasketballDrill\_832x480\_50 | 37 | 2383.527 | 2329.945 | 2266.668 | 2121.958 | 2381.432 | 2374.887 | 2375.413 | 2377.647 | 2370.921 | 2380.163 |
| BasketballDrive\_1920x1080\_50 | 22 | 13133.456 | 12957.673 | 12455.456 | 11384.697 | 13142.665 | 12980.227 | 13014.236 | 12933.675 | 13065.923 | 12940.71 |
| BasketballDrive\_1920x1080\_50 | 27 | 8331.329 | 8232.582 | 8185.564 | 7575.059 | 8375.957 | 8318.003 | 8313.482 | 8293.173 | 8306.746 | 8301.571 |
| BasketballDrive\_1920x1080\_50 | 32 | 5120.349 | 5086.56 | 5142.013 | 4862.106 | 5104.512 | 5159.841 | 5153.407 | 5142.366 | 5171.538 | 5157.783 |
| BasketballDrive\_1920x1080\_50 | 37 | 3049.644 | 3039.55 | 3103.744 | 3000.829 | 3071.631 | 3056.478 | 3048.722 | 3058.085 | 3053.267 | 3041.984 |
| BasketballPass\_416x240\_50 | 22 | 406.392 | 409.226 | 356.315 | 336.039 | 410.439 | 407.597 | 407.267 | 406.898 | 405.113 | 407.254 |
| BasketballPass\_416x240\_50 | 27 | 286.713 | 289.328 | 260.793 | 245.661 | 287.041 | 286.468 | 285.742 | 286.285 | 286.718 | 286.548 |
| BasketballPass\_416x240\_50 | 32 | 199.521 | 194.89 | 184.675 | 180.449 | 206.456 | 197.515 | 198.182 | 200.101 | 197.685 | 199.031 |
| BasketballPass\_416x240\_50 | 37 | 140.639 | 140.947 | 130.702 | 129.452 | 143.123 | 139.896 | 144.017 | 141.138 | 140.941 | 141.856 |
| BlowingBubbles\_416x240\_50 | 22 | 876.165 | 844.361 | 758.441 | 697.387 | 872.6 | 881.754 | 877.264 | 882.297 | 879.486 | 878.155 |
| BlowingBubbles\_416x240\_50 | 27 | 619.537 | 614.378 | 567.346 | 517.709 | 605.829 | 625.452 | 623.961 | 622.556 | 624.621 | 624.246 |
| BlowingBubbles\_416x240\_50 | 32 | 400.958 | 395.885 | 378.709 | 354.963 | 402.431 | 405.709 | 403.125 | 403.792 | 405.069 | 403.998 |
| BlowingBubbles\_416x240\_50 | 37 | 250.253 | 245.834 | 240.979 | 231.1 | 249.557 | 250.209 | 249.052 | 249.449 | 248.564 | 248.685 |

# SpeedupTable

Table from sheet 'SpeedupTable' in vtm\_report.xlsx

|  |  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| seq | qp | Performance-Deblock\_off | Performance-RDOQTS\_off | Performance-RDOQ\_off | Performance-SAO\_off | Speed-FDM | Speed-FEN | Speed-FastMrg | Speed-FastSearch | Speed-LCTUFast |
| BQTerrace\_1920x1080\_60 | 22 | 1.02039547695327 | 1.141224764633337 | 1.196400934791406 | 0.9998344077370706 | 1.035439658398469 | 1.031714883346459 | 1.035453823718524 | 1.029473972774396 | 1.03539753028541 |
| BQTerrace\_1920x1080\_60 | 27 | 1.032767036976297 | 1.091066322980614 | 1.130897892066366 | 1.00353888146321 | 1.029050121546516 | 1.027238499689469 | 1.036677316034208 | 1.022480970863316 | 1.029066314401502 |
| BQTerrace\_1920x1080\_60 | 32 | 1.010858389956414 | 1.052616551780397 | 1.10534716468215 | 0.9978227947199606 | 1.012485812760027 | 1.008256373536594 | 1.011516168977346 | 1.008621837584474 | 1.006824622361919 |
| BQTerrace\_1920x1080\_60 | 37 | 1.018821043466257 | 1.022652604114208 | 1.047858529433446 | 0.9881426791973458 | 0.9942267928002516 | 0.9924589914670393 | 0.9960851731773632 | 0.9968504599637515 | 0.9936435148939343 |
| BasketballDrill\_832x480\_50 | 22 | 1.031440368869759 | 1.170933967013183 | 1.330155288049268 | 1.000846645865659 | 0.9973730104251979 | 1.000378803031251 | 1.000648854173124 | 0.9995622081896155 | 0.9987061235547948 |
| BasketballDrill\_832x480\_50 | 27 | 1.030641912855084 | 1.127131093732612 | 1.244961933621484 | 1.001845300910561 | 1.000706646485034 | 1.001199694316764 | 0.9969946666524233 | 0.9989082972214329 | 1.00200715284653 |
| BasketballDrill\_832x480\_50 | 32 | 1.013257155693336 | 1.13254652458125 | 1.25401452044803 | 0.9998561684584901 | 0.9992685082047803 | 1.000591326812122 | 0.999462555658321 | 0.9981647435582653 | 1.00026940628461 |
| BasketballDrill\_832x480\_50 | 37 | 1.022997109373826 | 1.051555410849758 | 1.123267755535218 | 1.000879722788641 | 1.00363806783228 | 1.003415827058284 | 1.002473033213088 | 1.005316921145833 | 1.001413348581589 |
| BasketballDrive\_1920x1080\_50 | 22 | 1.013565938884243 | 1.054433976564166 | 1.153606108269724 | 0.9992993049735346 | 1.011804801256557 | 1.009160737518514 | 1.01544657647575 | 1.005168636000687 | 1.014894545971589 |
| BasketballDrive\_1920x1080\_50 | 27 | 1.011994657326219 | 1.017807569521172 | 1.099836846155258 | 0.9946718924177858 | 1.001602067226953 | 1.002146753911297 | 1.004600892806649 | 1.002959401912614 | 1.003584622717796 |
| BasketballDrive\_1920x1080\_50 | 32 | 1.006642799849014 | 0.9957868640160965 | 1.053113403944711 | 1.003102549274054 | 0.992346275786405 | 0.9935852145968677 | 0.99571850778416 | 0.9901017840340728 | 0.9927422305281164 |
| BasketballDrive\_1920x1080\_50 | 37 | 1.003320886315408 | 0.9825694387165951 | 1.016267171504941 | 0.9928419136282971 | 0.9977640931817601 | 1.00030242180166 | 0.9972397758728092 | 0.9988134021688899 | 1.002518093454798 |
| BasketballPass\_416x240\_50 | 22 | 0.9930747313220567 | 1.140541374907035 | 1.209359627900333 | 0.9901398258937381 | 0.9970436485057544 | 0.9978515322871728 | 0.9987564451041784 | 1.003157143809258 | 0.9978833848163553 |
| BasketballPass\_416x240\_50 | 27 | 0.9909618149643313 | 1.099389170721607 | 1.167108332213905 | 0.9988573060991288 | 1.00085524386668 | 1.003398170377473 | 1.001495013710114 | 0.9999825612622856 | 1.000575819757946 |
| BasketballPass\_416x240\_50 | 32 | 1.023762122222792 | 1.080389874103154 | 1.105691912950473 | 0.9664093075522145 | 1.010156190669063 | 1.006756415819802 | 0.9971014637608008 | 1.009287502845436 | 1.00246192804136 |
| BasketballPass\_416x240\_50 | 37 | 0.99781478144267 | 1.076027910820033 | 1.086418131817199 | 0.9826442989596362 | 1.005311088236976 | 0.976544435726338 | 0.996464453230172 | 0.9978572594206087 | 0.9914208775095873 |
| BlowingBubbles\_416x240\_50 | 22 | 1.037666353609416 | 1.155218401958755 | 1.256354076000843 | 1.004085491634197 | 0.9936614974244516 | 0.9987472414233343 | 0.9930499593674238 | 0.9962239307959422 | 0.9977338852480484 |
| BlowingBubbles\_416x240\_50 | 27 | 1.008397110573621 | 1.091991483151375 | 1.196689646113937 | 1.022626846849524 | 0.9905428394185326 | 0.9929098132735861 | 0.9951506370511247 | 0.9918606643068357 | 0.9924564995210222 |
| BlowingBubbles\_416x240\_50 | 32 | 1.012814327393056 | 1.058749594015458 | 1.129576885478205 | 0.9963397451985558 | 0.9882896361677952 | 0.994624496124031 | 0.9929815350477474 | 0.9898511117858932 | 0.9924752102733183 |
| BlowingBubbles\_416x240\_50 | 37 | 1.0179755444731 | 1.038484681237784 | 1.082877542189528 | 1.002788942005233 | 1.000175852986903 | 1.004822286108925 | 1.0032231037206 | 1.006795030656088 | 1.006305165168788 |

# Time\_vs\_QP\_All

Table from sheet 'Time\_vs\_QP\_All' in vtm\_report.xlsx

|  |  |  |
| --- | --- | --- |
| tool\_full | qp | enc\_time\_s |
| Baseline | 22 | 6294.8788 |
| Baseline | 27 | 3651.678 |
| Baseline | 32 | 2369.7296 |
| Baseline | 37 | 1548.6086 |
| Performance-Deblock\_off | 22 | 6174.556399999999 |
| Performance-Deblock\_off | 27 | 3575.7436 |
| Performance-Deblock\_off | 32 | 2346.362 |
| Performance-Deblock\_off | 37 | 1527.9612 |
| Performance-RDOQTS\_off | 22 | 5679.844 |
| Performance-RDOQTS\_off | 27 | 3433.3266 |
| Performance-RDOQTS\_off | 32 | 2262.3154 |
| Performance-RDOQTS\_off | 37 | 1523.7132 |
| Performance-RDOQ\_off | 22 | 5245.701 |
| Performance-RDOQ\_off | 27 | 3199.5078 |
| Performance-RDOQ\_off | 32 | 2119.3708 |
| Performance-RDOQ\_off | 37 | 1462.9348 |
| Performance-SAO\_off | 22 | 6296.3044 |
| Performance-SAO\_off | 27 | 3652.886 |
| Performance-SAO\_off | 32 | 2369.6088 |
| Performance-SAO\_off | 37 | 1557.55 |
| Speed-FDM | 22 | 6188.0904 |
| Speed-FDM | 27 | 3620.7932 |
| Speed-FDM | 32 | 2371.4548 |
| Speed-FDM | 37 | 1550.3186 |
| Speed-FEN | 22 | 6198.899800000001 |
| Speed-FEN | 27 | 3620.8082 |
| Speed-FEN | 32 | 2371.3512 |
| Speed-FEN | 37 | 1550.153 |
| Speed-FastMrg | 22 | 6175.221 |
| Speed-FastMrg | 27 | 3610.8342 |
| Speed-FastMrg | 32 | 2368.521 |
| Speed-FastMrg | 37 | 1550.5682 |
| Speed-FastSearch | 22 | 6215.0712 |
| Speed-FastSearch | 27 | 3626.2054 |
| Speed-FastSearch | 32 | 2376.6178 |
| Speed-FastSearch | 37 | 1547.7472 |
| Speed-LCTUFast | 22 | 6178.065 |
| Speed-LCTUFast | 27 | 3616.2492 |
| Speed-LCTUFast | 32 | 2373.6 |
| Speed-LCTUFast | 37 | 1548.7888 |

# SEQ\_BQTerrace\_1920x1080\_60

Table from sheet 'SEQ\_BQTerrace\_1920x1080\_60' in vtm\_report.xlsx

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| group | tool | qp | bitrate\_kbps | psnr\_yuv | enc\_time\_s |
| Baseline | nan | 37 | 1370.298 | 33.742 | 1918.98 |
| Baseline | nan | 32 | 2750.516 | 35.59 | 2916.191 |
| Baseline | nan | 27 | 6128.538 | 37.062 | 5100.95 |
| Baseline | nan | 22 | 26168.465 | 38.976 | 11731.697 |
| Performance | Deblock\_off | 37 | 1363.069 | 33.715 | 1883.53 |
| Performance | Deblock\_off | 32 | 2742.793 | 35.574 | 2884.866 |
| Performance | Deblock\_off | 27 | 6115.578 | 37.053 | 4939.11 |
| Performance | Deblock\_off | 22 | 26194.734 | 38.978 | 11497.206 |
| Performance | RDOQTS\_off | 37 | 1427.491 | 33.816 | 1876.473 |
| Performance | RDOQTS\_off | 32 | 2856.305 | 35.632 | 2770.421 |
| Performance | RDOQTS\_off | 27 | 6361.847 | 37.083 | 4675.197 |
| Performance | RDOQTS\_off | 22 | 26899.942 | 38.959 | 10279.918 |
| Performance | RDOQ\_off | 37 | 1453.76 | 33.819 | 1831.335 |
| Performance | RDOQ\_off | 32 | 2871.796 | 35.603 | 2638.258 |
| Performance | RDOQ\_off | 27 | 6387.52 | 37.038 | 4510.531 |
| Performance | RDOQ\_off | 22 | 25852.495 | 38.855 | 9805.824 |
| Performance | SAO\_off | 37 | 1364.189 | 33.73 | 1942.007 |
| Performance | SAO\_off | 32 | 2739.825 | 35.578 | 2922.554 |
| Performance | SAO\_off | 27 | 6097.644 | 37.048 | 5082.962 |
| Performance | SAO\_off | 22 | 26159.433 | 38.976 | 11733.64 |
| Speed | FDM | 37 | 1370.298 | 33.742 | 1930.123 |
| Speed | FDM | 32 | 2750.516 | 35.59 | 2880.229 |
| Speed | FDM | 27 | 6128.538 | 37.062 | 4956.95 |
| Speed | FDM | 22 | 26168.465 | 38.976 | 11330.16 |
| Speed | FEN | 37 | 1370.298 | 33.742 | 1933.561 |
| Speed | FEN | 32 | 2750.516 | 35.59 | 2892.311 |
| Speed | FEN | 27 | 6128.538 | 37.062 | 4965.692 |
| Speed | FEN | 22 | 26168.465 | 38.976 | 11371.065 |
| Speed | FastMrg | 37 | 1370.298 | 33.742 | 1926.522 |
| Speed | FastMrg | 32 | 2750.516 | 35.59 | 2882.99 |
| Speed | FastMrg | 27 | 6128.538 | 37.062 | 4920.48 |
| Speed | FastMrg | 22 | 26168.465 | 38.976 | 11330.005 |
| Speed | FastSearch | 37 | 1370.298 | 33.742 | 1925.043 |
| Speed | FastSearch | 32 | 2750.516 | 35.59 | 2891.263 |
| Speed | FastSearch | 27 | 6128.538 | 37.062 | 4988.797 |
| Speed | FastSearch | 22 | 26168.465 | 38.976 | 11395.817 |
| Speed | LCTUFast | 37 | 1370.298 | 33.742 | 1931.256 |
| Speed | LCTUFast | 32 | 2750.516 | 35.59 | 2896.424 |
| Speed | LCTUFast | 27 | 6128.538 | 37.062 | 4956.872 |
| Speed | LCTUFast | 22 | 26168.465 | 38.976 | 11330.621 |

# SEQ\_BasketballDrill\_832x480\_5

Table from sheet 'SEQ\_BasketballDrill\_832x480\_5' in vtm\_report.xlsx

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| group | tool | qp | bitrate\_kbps | psnr\_yuv | enc\_time\_s |
| Baseline | nan | 37 | 1575.018 | 30.462 | 2383.527 |
| Baseline | nan | 32 | 3042.327 | 33.237 | 3211.629 |
| Baseline | nan | 27 | 5723.406 | 36.335 | 3919.861 |
| Baseline | nan | 22 | 11419.188 | 40.46 | 5326.684 |
| Performance | Deblock\_off | 37 | 1568.097 | 30.381 | 2329.945 |
| Performance | Deblock\_off | 32 | 3046.352 | 33.203 | 3169.609 |
| Performance | Deblock\_off | 27 | 5725.915 | 36.295 | 3803.32 |
| Performance | Deblock\_off | 22 | 11407.224 | 40.462 | 5164.316 |
| Performance | RDOQTS\_off | 37 | 1625.685 | 30.548 | 2266.668 |
| Performance | RDOQTS\_off | 32 | 3136.642 | 33.308 | 2835.759 |
| Performance | RDOQTS\_off | 27 | 5876.267 | 36.356 | 3477.733 |
| Performance | RDOQTS\_off | 22 | 11652.982 | 40.409 | 4549.09 |
| Performance | RDOQ\_off | 37 | 1572.012 | 30.354 | 2121.958 |
| Performance | RDOQ\_off | 32 | 3034.012 | 33.039 | 2561.078 |
| Performance | RDOQ\_off | 27 | 5699.382 | 35.998 | 3148.579 |
| Performance | RDOQ\_off | 22 | 11334.933 | 39.95 | 4004.558 |
| Performance | SAO\_off | 37 | 1571.867 | 30.451 | 2381.432 |
| Performance | SAO\_off | 32 | 3042.085 | 33.228 | 3212.091 |
| Performance | SAO\_off | 27 | 5721.782 | 36.327 | 3912.641 |
| Performance | SAO\_off | 22 | 11410.449 | 40.463 | 5322.178 |
| Speed | FDM | 37 | 1575.018 | 30.462 | 2374.887 |
| Speed | FDM | 32 | 3042.327 | 33.237 | 3213.98 |
| Speed | FDM | 27 | 5723.406 | 36.335 | 3917.093 |
| Speed | FDM | 22 | 11419.188 | 40.46 | 5340.714 |
| Speed | FEN | 37 | 1575.018 | 30.462 | 2375.413 |
| Speed | FEN | 32 | 3042.327 | 33.237 | 3209.731 |
| Speed | FEN | 27 | 5723.406 | 36.335 | 3915.164 |
| Speed | FEN | 22 | 11419.188 | 40.46 | 5324.667 |
| Speed | FastMrg | 37 | 1575.018 | 30.462 | 2377.647 |
| Speed | FastMrg | 32 | 3042.327 | 33.237 | 3213.356 |
| Speed | FastMrg | 27 | 5723.406 | 36.335 | 3931.677 |
| Speed | FastMrg | 22 | 11419.188 | 40.46 | 5323.23 |
| Speed | FastSearch | 37 | 1575.018 | 30.462 | 2370.921 |
| Speed | FastSearch | 32 | 3042.327 | 33.237 | 3217.534 |
| Speed | FastSearch | 27 | 5723.406 | 36.335 | 3924.145 |
| Speed | FastSearch | 22 | 11419.188 | 40.46 | 5329.017 |
| Speed | LCTUFast | 37 | 1575.018 | 30.462 | 2380.163 |
| Speed | LCTUFast | 32 | 3042.327 | 33.237 | 3210.764 |
| Speed | LCTUFast | 27 | 5723.406 | 36.335 | 3912.009 |
| Speed | LCTUFast | 22 | 11419.188 | 40.46 | 5333.585 |

# SEQ\_BasketballDrive\_1920x1080

Table from sheet 'SEQ\_BasketballDrive\_1920x1080' in vtm\_report.xlsx

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| group | tool | qp | bitrate\_kbps | psnr\_yuv | enc\_time\_s |
| Baseline | nan | 37 | 966.994 | 37.09 | 3049.644 |
| Baseline | nan | 32 | 1812.764 | 38.809 | 5120.349 |
| Baseline | nan | 27 | 3542.303 | 40.174 | 8331.329 |
| Baseline | nan | 22 | 7908.024 | 41.181 | 13133.456 |
| Performance | Deblock\_off | 37 | 971.115 | 36.995 | 3039.55 |
| Performance | Deblock\_off | 32 | 1807.345 | 38.74 | 5086.56 |
| Performance | Deblock\_off | 27 | 3534.339 | 40.139 | 8232.582 |
| Performance | Deblock\_off | 22 | 7916.388 | 41.171 | 12957.673 |
| Performance | RDOQTS\_off | 37 | 1007.297 | 37.155 | 3103.744 |
| Performance | RDOQTS\_off | 32 | 1875.988 | 38.852 | 5142.013 |
| Performance | RDOQTS\_off | 27 | 3665.103 | 40.202 | 8185.564 |
| Performance | RDOQTS\_off | 22 | 8129.903 | 41.187 | 12455.456 |
| Performance | RDOQ\_off | 37 | 998.436 | 37.047 | 3000.829 |
| Performance | RDOQ\_off | 32 | 1865.733 | 38.74 | 4862.106 |
| Performance | RDOQ\_off | 27 | 3650.97 | 40.099 | 7575.059 |
| Performance | RDOQ\_off | 22 | 8120.836 | 41.105 | 11384.697 |
| Performance | SAO\_off | 37 | 969.442 | 37.093 | 3071.631 |
| Performance | SAO\_off | 32 | 1807.77 | 38.8 | 5104.512 |
| Performance | SAO\_off | 27 | 3536.618 | 40.176 | 8375.957 |
| Performance | SAO\_off | 22 | 7881.794 | 41.18 | 13142.665 |
| Speed | FDM | 37 | 966.994 | 37.09 | 3056.478 |
| Speed | FDM | 32 | 1812.764 | 38.809 | 5159.841 |
| Speed | FDM | 27 | 3542.303 | 40.174 | 8318.003 |
| Speed | FDM | 22 | 7908.024 | 41.181 | 12980.227 |
| Speed | FEN | 37 | 966.994 | 37.09 | 3048.722 |
| Speed | FEN | 32 | 1812.764 | 38.809 | 5153.407 |
| Speed | FEN | 27 | 3542.303 | 40.174 | 8313.482 |
| Speed | FEN | 22 | 7908.024 | 41.181 | 13014.236 |
| Speed | FastMrg | 37 | 966.994 | 37.09 | 3058.085 |
| Speed | FastMrg | 32 | 1812.764 | 38.809 | 5142.366 |
| Speed | FastMrg | 27 | 3542.303 | 40.174 | 8293.173 |
| Speed | FastMrg | 22 | 7908.024 | 41.181 | 12933.675 |
| Speed | FastSearch | 37 | 966.994 | 37.09 | 3053.267 |
| Speed | FastSearch | 32 | 1812.764 | 38.809 | 5171.538 |
| Speed | FastSearch | 27 | 3542.303 | 40.174 | 8306.746 |
| Speed | FastSearch | 22 | 7908.024 | 41.181 | 13065.923 |
| Speed | LCTUFast | 37 | 966.994 | 37.09 | 3041.984 |
| Speed | LCTUFast | 32 | 1812.764 | 38.809 | 5157.783 |
| Speed | LCTUFast | 27 | 3542.303 | 40.174 | 8301.571 |
| Speed | LCTUFast | 22 | 7908.024 | 41.181 | 12940.71 |

# SEQ\_BasketballPass\_416x240\_50

Table from sheet 'SEQ\_BasketballPass\_416x240\_50' in vtm\_report.xlsx

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| group | tool | qp | bitrate\_kbps | psnr\_yuv | enc\_time\_s |
| Baseline | nan | 37 | 100.642 | 34.244 | 140.639 |
| Baseline | nan | 32 | 188.751 | 36.995 | 199.521 |
| Baseline | nan | 27 | 356.388 | 40.065 | 286.713 |
| Baseline | nan | 22 | 687.515 | 43.555 | 406.392 |
| Performance | Deblock\_off | 37 | 102.194 | 34.179 | 140.947 |
| Performance | Deblock\_off | 32 | 187.515 | 36.889 | 194.89 |
| Performance | Deblock\_off | 27 | 358.085 | 40.046 | 289.328 |
| Performance | Deblock\_off | 22 | 688.618 | 43.553 | 409.226 |
| Performance | RDOQTS\_off | 37 | 104.849 | 34.327 | 130.702 |
| Performance | RDOQTS\_off | 32 | 194.364 | 37.055 | 184.675 |
| Performance | RDOQTS\_off | 27 | 370.23 | 40.152 | 260.793 |
| Performance | RDOQTS\_off | 22 | 710.8 | 43.594 | 356.315 |
| Performance | RDOQ\_off | 37 | 105.224 | 34.251 | 129.452 |
| Performance | RDOQ\_off | 32 | 194.897 | 36.962 | 180.449 |
| Performance | RDOQ\_off | 27 | 368.812 | 40.006 | 245.661 |
| Performance | RDOQ\_off | 22 | 707.673 | 43.357 | 336.039 |
| Performance | SAO\_off | 37 | 101.636 | 34.211 | 143.123 |
| Performance | SAO\_off | 32 | 187.77 | 36.978 | 206.456 |
| Performance | SAO\_off | 27 | 356.388 | 40.077 | 287.041 |
| Performance | SAO\_off | 22 | 686.703 | 43.536 | 410.439 |
| Speed | FDM | 37 | 100.642 | 34.244 | 139.896 |
| Speed | FDM | 32 | 188.751 | 36.995 | 197.515 |
| Speed | FDM | 27 | 356.388 | 40.065 | 286.468 |
| Speed | FDM | 22 | 687.515 | 43.555 | 407.597 |
| Speed | FEN | 37 | 100.642 | 34.244 | 144.017 |
| Speed | FEN | 32 | 188.751 | 36.995 | 198.182 |
| Speed | FEN | 27 | 356.388 | 40.065 | 285.742 |
| Speed | FEN | 22 | 687.515 | 43.555 | 407.267 |
| Speed | FastMrg | 37 | 100.642 | 34.244 | 141.138 |
| Speed | FastMrg | 32 | 188.751 | 36.995 | 200.101 |
| Speed | FastMrg | 27 | 356.388 | 40.065 | 286.285 |
| Speed | FastMrg | 22 | 687.515 | 43.555 | 406.898 |
| Speed | FastSearch | 37 | 100.642 | 34.244 | 140.941 |
| Speed | FastSearch | 32 | 188.751 | 36.995 | 197.685 |
| Speed | FastSearch | 27 | 356.388 | 40.065 | 286.718 |
| Speed | FastSearch | 22 | 687.515 | 43.555 | 405.113 |
| Speed | LCTUFast | 37 | 100.642 | 34.244 | 141.856 |
| Speed | LCTUFast | 32 | 188.751 | 36.995 | 199.031 |
| Speed | LCTUFast | 27 | 356.388 | 40.065 | 286.548 |
| Speed | LCTUFast | 22 | 687.515 | 43.555 | 407.254 |

# SEQ\_BlowingBubbles\_416x240\_50

Table from sheet 'SEQ\_BlowingBubbles\_416x240\_50' in vtm\_report.xlsx

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| group | tool | qp | bitrate\_kbps | psnr\_yuv | enc\_time\_s |
| Baseline | nan | 37 | 174.618 | 31.378 | 250.253 |
| Baseline | nan | 32 | 351.151 | 33.85 | 400.958 |
| Baseline | nan | 27 | 710.412 | 36.562 | 619.537 |
| Baseline | nan | 22 | 1503.83 | 39.586 | 876.165 |
| Performance | Deblock\_off | 37 | 176.036 | 31.329 | 245.834 |
| Performance | Deblock\_off | 32 | 351.612 | 33.79 | 395.885 |
| Performance | Deblock\_off | 27 | 711.976 | 36.524 | 614.378 |
| Performance | Deblock\_off | 22 | 1503.406 | 39.572 | 844.361 |
| Performance | RDOQTS\_off | 37 | 182.521 | 31.467 | 240.979 |
| Performance | RDOQTS\_off | 32 | 366.752 | 33.922 | 378.709 |
| Performance | RDOQTS\_off | 27 | 737.891 | 36.608 | 567.346 |
| Performance | RDOQTS\_off | 22 | 1553.891 | 39.586 | 758.441 |
| Performance | RDOQ\_off | 37 | 182.727 | 31.437 | 231.1 |
| Performance | RDOQ\_off | 32 | 362.897 | 33.792 | 354.963 |
| Performance | RDOQ\_off | 27 | 728.848 | 36.437 | 517.709 |
| Performance | RDOQ\_off | 22 | 1532.206 | 39.351 | 697.387 |
| Performance | SAO\_off | 37 | 175.297 | 31.394 | 249.557 |
| Performance | SAO\_off | 32 | 352.642 | 33.853 | 402.431 |
| Performance | SAO\_off | 27 | 710.461 | 36.544 | 605.829 |
| Performance | SAO\_off | 22 | 1504.376 | 39.592 | 872.6 |
| Speed | FDM | 37 | 174.618 | 31.378 | 250.209 |
| Speed | FDM | 32 | 351.151 | 33.85 | 405.709 |
| Speed | FDM | 27 | 710.412 | 36.562 | 625.452 |
| Speed | FDM | 22 | 1503.83 | 39.586 | 881.754 |
| Speed | FEN | 37 | 174.618 | 31.378 | 249.052 |
| Speed | FEN | 32 | 351.151 | 33.85 | 403.125 |
| Speed | FEN | 27 | 710.412 | 36.562 | 623.961 |
| Speed | FEN | 22 | 1503.83 | 39.586 | 877.264 |
| Speed | FastMrg | 37 | 174.618 | 31.378 | 249.449 |
| Speed | FastMrg | 32 | 351.151 | 33.85 | 403.792 |
| Speed | FastMrg | 27 | 710.412 | 36.562 | 622.556 |
| Speed | FastMrg | 22 | 1503.83 | 39.586 | 882.297 |
| Speed | FastSearch | 37 | 174.618 | 31.378 | 248.564 |
| Speed | FastSearch | 32 | 351.151 | 33.85 | 405.069 |
| Speed | FastSearch | 27 | 710.412 | 36.562 | 624.621 |
| Speed | FastSearch | 22 | 1503.83 | 39.586 | 879.486 |
| Speed | LCTUFast | 37 | 174.618 | 31.378 | 248.685 |
| Speed | LCTUFast | 32 | 351.151 | 33.85 | 403.998 |
| Speed | LCTUFast | 27 | 710.412 | 36.562 | 624.246 |
| Speed | LCTUFast | 22 | 1503.83 | 39.586 | 878.155 |