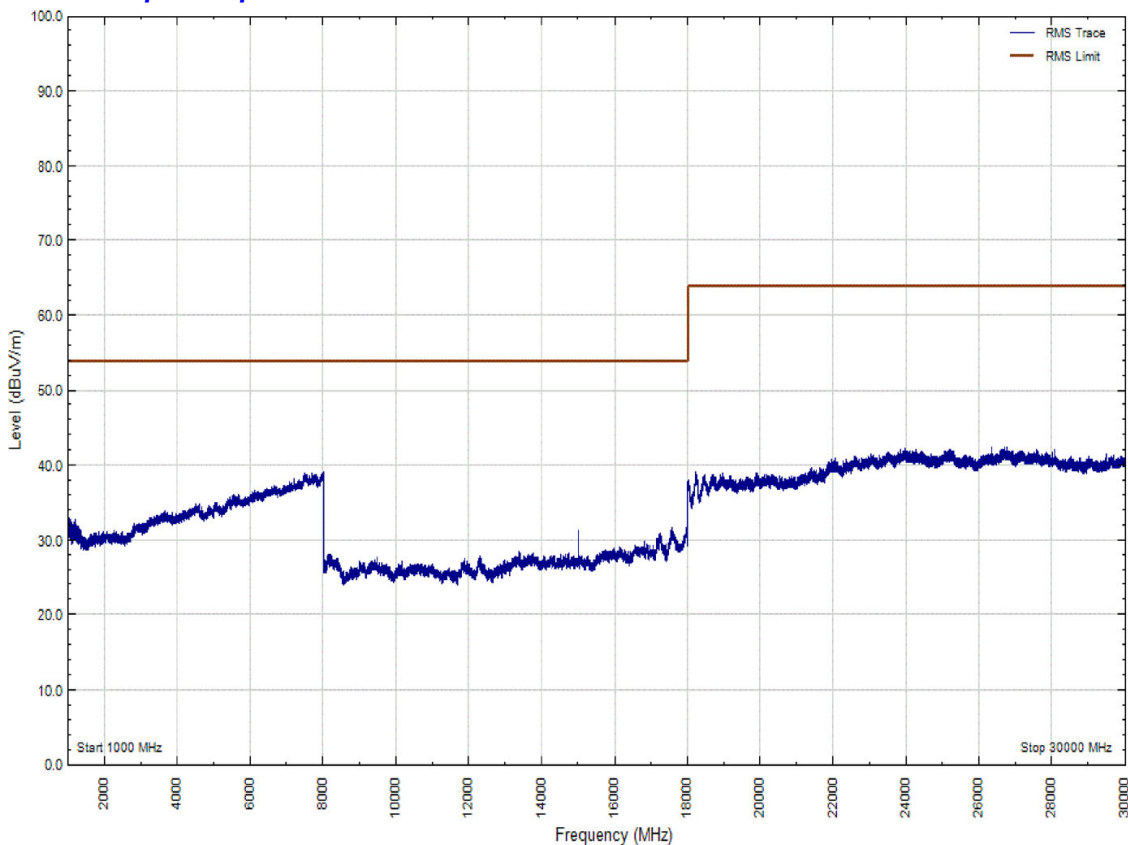


Prepared by: Dr Vitas Anderson (Two Fields Consulting)
Date: 14 June 2022

FCC ID: BCGA2179 (Configuration 1, Figure 17, Class B device)
Frequency span: 1,000 MHz to 30,000 MHz
RBW: 1.0 MHz, distance: 3 m
Peak-to-average correction: N/A
No. of sample points: 29,000
Cumulative S level: $3.735\text{E-}07 \text{ W/m}^2$
Device radiated power: 0.0258 mW

EMC test spectral plot



Plot of extracted data from EMC test spectral plot

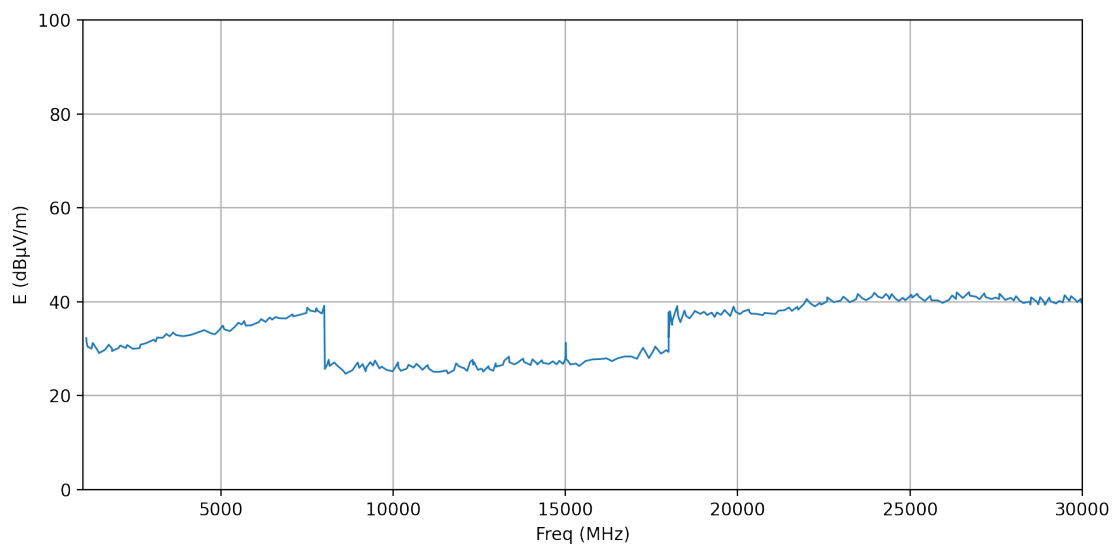


Table of extracted data from EMC test spectral plot

| Freq (MHz) | E (dBμV/m) | E (V/m rms) | S (W/m²) |
|------------|------------|-------------|-----------|
| 1090 | 32.26 | 3.226E+01 | 4.467E-12 |
| 1099 | 31.34 | 3.134E+01 | 3.612E-12 |
| 1132 | 30.39 | 3.039E+01 | 2.905E-12 |
| 1244 | 30.03 | 3.003E+01 | 2.671E-12 |
| 1277 | 31.24 | 3.124E+01 | 3.532E-12 |
| 1405 | 29.81 | 2.981E+01 | 2.538E-12 |
| 1459 | 29.08 | 2.908E+01 | 2.146E-12 |
| 1634 | 29.77 | 2.977E+01 | 2.517E-12 |
| 1741 | 30.85 | 3.085E+01 | 3.228E-12 |
| 1835 | 30.09 | 3.009E+01 | 2.710E-12 |
| 1835 | 29.49 | 2.949E+01 | 2.361E-12 |
| 2029 | 30.17 | 3.017E+01 | 2.758E-12 |
| 2076 | 30.70 | 3.070E+01 | 3.117E-12 |
| 2236 | 30.13 | 3.013E+01 | 2.734E-12 |
| 2275 | 30.80 | 3.080E+01 | 3.191E-12 |
| 2438 | 29.98 | 2.998E+01 | 2.638E-12 |
| 2639 | 30.13 | 3.013E+01 | 2.733E-12 |
| 2662 | 30.85 | 3.085E+01 | 3.228E-12 |
| 2832 | 31.19 | 3.119E+01 | 3.493E-12 |
| 2934 | 31.55 | 3.155E+01 | 3.787E-12 |
| 3049 | 31.92 | 3.192E+01 | 4.130E-12 |
| 3106 | 31.50 | 3.150E+01 | 3.750E-12 |
| 3143 | 32.38 | 3.238E+01 | 4.590E-12 |
| 3305 | 32.30 | 3.230E+01 | 4.503E-12 |
| 3415 | 33.15 | 3.315E+01 | 5.472E-12 |
| 3508 | 32.64 | 3.264E+01 | 4.874E-12 |
| 3613 | 33.45 | 3.345E+01 | 5.871E-12 |
| 3694 | 32.91 | 3.291E+01 | 5.182E-12 |
| 3902 | 32.67 | 3.267E+01 | 4.902E-12 |
| 4107 | 32.91 | 3.291E+01 | 5.185E-12 |
| 4311 | 33.42 | 3.342E+01 | 5.824E-12 |
| 4514 | 33.96 | 3.396E+01 | 6.599E-12 |
| 4705 | 33.29 | 3.329E+01 | 5.660E-12 |
| 4822 | 33.08 | 3.308E+01 | 5.386E-12 |
| 4921 | 33.73 | 3.373E+01 | 6.264E-12 |
| 5057 | 34.93 | 3.493E+01 | 8.249E-12 |
| 5095 | 34.13 | 3.413E+01 | 6.871E-12 |
| 5257 | 33.74 | 3.374E+01 | 6.269E-12 |
| 5405 | 34.68 | 3.468E+01 | 7.793E-12 |
| 5507 | 35.54 | 3.554E+01 | 9.496E-12 |
| 5602 | 35.15 | 3.515E+01 | 8.674E-12 |
| 5674 | 35.90 | 3.590E+01 | 1.031E-11 |
| 5718 | 34.91 | 3.491E+01 | 8.222E-12 |
| 5885 | 35.01 | 3.501E+01 | 8.408E-12 |
| 6096 | 35.65 | 3.565E+01 | 9.747E-12 |
| 6166 | 36.30 | 3.630E+01 | 1.132E-11 |

| | | | |
|-------|-------|-----------|-----------|
| 6292 | 35.71 | 3.571E+01 | 9.887E-12 |
| 6417 | 36.66 | 3.666E+01 | 1.229E-11 |
| 6486 | 36.20 | 3.620E+01 | 1.105E-11 |
| 6584 | 36.76 | 3.676E+01 | 1.258E-11 |
| 6693 | 36.48 | 3.648E+01 | 1.180E-11 |
| 6894 | 36.44 | 3.644E+01 | 1.170E-11 |
| 7076 | 37.32 | 3.732E+01 | 1.432E-11 |
| 7100 | 36.88 | 3.688E+01 | 1.295E-11 |
| 7295 | 37.24 | 3.724E+01 | 1.404E-11 |
| 7482 | 37.63 | 3.763E+01 | 1.536E-11 |
| 7504 | 38.75 | 3.875E+01 | 1.988E-11 |
| 7587 | 38.13 | 3.813E+01 | 1.725E-11 |
| 7748 | 37.88 | 3.788E+01 | 1.630E-11 |
| 7766 | 38.65 | 3.865E+01 | 1.942E-11 |
| 7815 | 38.03 | 3.803E+01 | 1.685E-11 |
| 7929 | 37.49 | 3.749E+01 | 1.489E-11 |
| 7998 | 39.16 | 3.916E+01 | 2.187E-11 |
| 8015 | 25.67 | 2.567E+01 | 9.794E-13 |
| 8084 | 26.61 | 2.661E+01 | 1.214E-12 |
| 8126 | 27.66 | 2.766E+01 | 1.548E-12 |
| 8155 | 26.33 | 2.633E+01 | 1.140E-12 |
| 8291 | 27.08 | 2.708E+01 | 1.355E-12 |
| 8380 | 26.35 | 2.635E+01 | 1.144E-12 |
| 8543 | 25.38 | 2.538E+01 | 9.147E-13 |
| 8612 | 24.67 | 2.467E+01 | 7.776E-13 |
| 8813 | 25.39 | 2.539E+01 | 9.179E-13 |
| 8969 | 27.08 | 2.708E+01 | 1.355E-12 |
| 9013 | 25.93 | 2.593E+01 | 1.038E-12 |
| 9115 | 26.73 | 2.673E+01 | 1.249E-12 |
| 9199 | 25.17 | 2.517E+01 | 8.713E-13 |
| 9223 | 26.00 | 2.600E+01 | 1.057E-12 |
| 9335 | 27.14 | 2.714E+01 | 1.371E-12 |
| 9409 | 26.39 | 2.639E+01 | 1.155E-12 |
| 9471 | 27.49 | 2.749E+01 | 1.489E-12 |
| 9601 | 25.80 | 2.580E+01 | 1.008E-12 |
| 9664 | 26.19 | 2.619E+01 | 1.102E-12 |
| 9808 | 25.48 | 2.548E+01 | 9.368E-13 |
| 9984 | 25.19 | 2.519E+01 | 8.761E-13 |
| 10057 | 26.01 | 2.601E+01 | 1.060E-12 |
| 10140 | 27.08 | 2.708E+01 | 1.355E-12 |
| 10152 | 26.00 | 2.600E+01 | 1.057E-12 |
| 10223 | 25.29 | 2.529E+01 | 8.962E-13 |
| 10397 | 25.78 | 2.578E+01 | 1.004E-12 |
| 10444 | 26.57 | 2.657E+01 | 1.205E-12 |
| 10595 | 25.98 | 2.598E+01 | 1.050E-12 |
| 10674 | 26.78 | 2.678E+01 | 1.263E-12 |
| 10788 | 26.03 | 2.603E+01 | 1.063E-12 |
| 10848 | 25.51 | 2.551E+01 | 9.427E-13 |
| 10998 | 26.52 | 2.652E+01 | 1.191E-12 |

| | | | |
|-------|-------|-----------|-----------|
| 11032 | 25.76 | 2.576E+01 | 9.988E-13 |
| 11167 | 25.09 | 2.509E+01 | 8.573E-13 |
| 11344 | 25.08 | 2.508E+01 | 8.538E-13 |
| 11546 | 25.38 | 2.538E+01 | 9.160E-13 |
| 11586 | 24.73 | 2.473E+01 | 7.884E-13 |
| 11764 | 25.40 | 2.540E+01 | 9.202E-13 |
| 11824 | 26.88 | 2.688E+01 | 1.293E-12 |
| 11905 | 26.27 | 2.627E+01 | 1.124E-12 |
| 12060 | 25.83 | 2.583E+01 | 1.015E-12 |
| 12147 | 25.27 | 2.527E+01 | 8.924E-13 |
| 12232 | 27.19 | 2.719E+01 | 1.388E-12 |
| 12305 | 27.64 | 2.764E+01 | 1.542E-12 |
| 12319 | 26.60 | 2.660E+01 | 1.211E-12 |
| 12347 | 27.14 | 2.714E+01 | 1.371E-12 |
| 12459 | 25.50 | 2.550E+01 | 9.401E-13 |
| 12567 | 25.76 | 2.576E+01 | 9.992E-13 |
| 12612 | 25.13 | 2.513E+01 | 8.644E-13 |
| 12766 | 26.27 | 2.627E+01 | 1.124E-12 |
| 12786 | 25.69 | 2.569E+01 | 9.830E-13 |
| 12904 | 25.30 | 2.530E+01 | 8.990E-13 |
| 12975 | 26.88 | 2.688E+01 | 1.293E-12 |
| 12991 | 26.19 | 2.619E+01 | 1.102E-12 |
| 13182 | 26.56 | 2.656E+01 | 1.201E-12 |
| 13226 | 27.49 | 2.749E+01 | 1.489E-12 |
| 13362 | 28.31 | 2.831E+01 | 1.796E-12 |
| 13372 | 27.10 | 2.710E+01 | 1.362E-12 |
| 13525 | 26.66 | 2.666E+01 | 1.230E-12 |
| 13641 | 27.20 | 2.720E+01 | 1.391E-12 |
| 13770 | 27.90 | 2.790E+01 | 1.635E-12 |
| 13797 | 27.18 | 2.718E+01 | 1.385E-12 |
| 13986 | 26.54 | 2.654E+01 | 1.195E-12 |
| 14042 | 27.75 | 2.775E+01 | 1.579E-12 |
| 14158 | 26.96 | 2.696E+01 | 1.318E-12 |
| 14185 | 26.64 | 2.664E+01 | 1.225E-12 |
| 14314 | 27.54 | 2.754E+01 | 1.506E-12 |
| 14343 | 27.00 | 2.700E+01 | 1.330E-12 |
| 14521 | 26.74 | 2.674E+01 | 1.253E-12 |
| 14631 | 27.31 | 2.731E+01 | 1.428E-12 |
| 14745 | 26.68 | 2.668E+01 | 1.234E-12 |
| 14821 | 27.41 | 2.741E+01 | 1.461E-12 |
| 14931 | 26.75 | 2.675E+01 | 1.256E-12 |
| 14995 | 27.76 | 2.776E+01 | 1.584E-12 |
| 15010 | 31.29 | 3.129E+01 | 3.573E-12 |
| 15021 | 27.77 | 2.777E+01 | 1.587E-12 |
| 15073 | 27.41 | 2.741E+01 | 1.461E-12 |
| 15142 | 26.65 | 2.665E+01 | 1.226E-12 |
| 15306 | 26.84 | 2.684E+01 | 1.281E-12 |
| 15399 | 26.32 | 2.632E+01 | 1.137E-12 |
| 15587 | 27.40 | 2.740E+01 | 1.457E-12 |

Calculate device radiated power from EMC test data

| | | | |
|-------|-------|-----------|-----------|
| 15791 | 27.73 | 2.773E+01 | 1.573E-12 |
| 15991 | 27.79 | 2.779E+01 | 1.594E-12 |
| 16193 | 27.94 | 2.794E+01 | 1.652E-12 |
| 16350 | 27.37 | 2.737E+01 | 1.446E-12 |
| 16525 | 27.99 | 2.799E+01 | 1.669E-12 |
| 16732 | 28.36 | 2.836E+01 | 1.818E-12 |
| 16916 | 28.34 | 2.834E+01 | 1.809E-12 |
| 17076 | 27.86 | 2.786E+01 | 1.621E-12 |
| 17177 | 29.26 | 2.926E+01 | 2.236E-12 |
| 17253 | 30.19 | 3.019E+01 | 2.772E-12 |
| 17361 | 28.81 | 2.881E+01 | 2.019E-12 |
| 17422 | 27.98 | 2.798E+01 | 1.667E-12 |
| 17563 | 29.72 | 2.972E+01 | 2.484E-12 |
| 17606 | 30.47 | 3.047E+01 | 2.957E-12 |
| 17773 | 28.95 | 2.895E+01 | 2.085E-12 |
| 17927 | 29.70 | 2.970E+01 | 2.474E-12 |
| 17995 | 29.31 | 2.931E+01 | 2.263E-12 |
| 17998 | 37.80 | 3.780E+01 | 1.600E-11 |
| 17998 | 33.42 | 3.342E+01 | 5.824E-12 |
| 17998 | 32.44 | 3.244E+01 | 4.650E-12 |
| 18036 | 37.99 | 3.799E+01 | 1.669E-11 |
| 18094 | 35.06 | 3.506E+01 | 8.508E-12 |
| 18102 | 35.90 | 3.590E+01 | 1.033E-11 |
| 18243 | 39.10 | 3.910E+01 | 2.154E-11 |
| 18270 | 36.97 | 3.697E+01 | 1.319E-11 |
| 18336 | 35.64 | 3.564E+01 | 9.721E-12 |
| 18455 | 38.11 | 3.811E+01 | 1.717E-11 |
| 18499 | 37.01 | 3.701E+01 | 1.333E-11 |
| 18600 | 36.47 | 3.647E+01 | 1.177E-11 |
| 18713 | 37.52 | 3.752E+01 | 1.500E-11 |
| 18756 | 38.05 | 3.805E+01 | 1.692E-11 |
| 18916 | 37.40 | 3.740E+01 | 1.458E-11 |
| 19019 | 37.87 | 3.787E+01 | 1.623E-11 |
| 19114 | 37.17 | 3.717E+01 | 1.383E-11 |
| 19246 | 37.69 | 3.769E+01 | 1.559E-11 |
| 19330 | 36.77 | 3.677E+01 | 1.261E-11 |
| 19397 | 37.73 | 3.773E+01 | 1.572E-11 |
| 19514 | 37.20 | 3.720E+01 | 1.392E-11 |
| 19617 | 38.24 | 3.824E+01 | 1.768E-11 |
| 19697 | 37.63 | 3.763E+01 | 1.536E-11 |
| 19786 | 36.97 | 3.697E+01 | 1.320E-11 |
| 19878 | 38.95 | 3.895E+01 | 2.083E-11 |
| 19934 | 37.90 | 3.790E+01 | 1.637E-11 |
| 20071 | 37.35 | 3.735E+01 | 1.442E-11 |
| 20156 | 37.92 | 3.792E+01 | 1.643E-11 |
| 20328 | 38.34 | 3.834E+01 | 1.810E-11 |
| 20342 | 37.79 | 3.779E+01 | 1.594E-11 |
| 20390 | 37.47 | 3.747E+01 | 1.481E-11 |
| 20564 | 37.40 | 3.740E+01 | 1.457E-11 |

Calculate device radiated power from EMC test data

| | | | |
|-------|-------|-----------|-----------|
| 20727 | 37.14 | 3.714E+01 | 1.372E-11 |
| 20782 | 37.62 | 3.762E+01 | 1.532E-11 |
| 20961 | 37.49 | 3.749E+01 | 1.488E-11 |
| 21096 | 37.40 | 3.740E+01 | 1.456E-11 |
| 21180 | 38.10 | 3.810E+01 | 1.713E-11 |
| 21360 | 38.20 | 3.820E+01 | 1.753E-11 |
| 21485 | 38.80 | 3.880E+01 | 2.010E-11 |
| 21571 | 38.05 | 3.805E+01 | 1.692E-11 |
| 21730 | 38.91 | 3.891E+01 | 2.065E-11 |
| 21756 | 38.31 | 3.831E+01 | 1.797E-11 |
| 21931 | 39.61 | 3.961E+01 | 2.424E-11 |
| 22002 | 40.58 | 4.058E+01 | 3.032E-11 |
| 22105 | 39.68 | 3.968E+01 | 2.463E-11 |
| 22241 | 39.03 | 3.903E+01 | 2.119E-11 |
| 22386 | 39.75 | 3.975E+01 | 2.503E-11 |
| 22427 | 39.39 | 3.939E+01 | 2.307E-11 |
| 22597 | 40.10 | 4.010E+01 | 2.713E-11 |
| 22598 | 40.94 | 4.094E+01 | 3.292E-11 |
| 22791 | 39.90 | 3.990E+01 | 2.589E-11 |
| 22991 | 40.28 | 4.028E+01 | 2.826E-11 |
| 23068 | 41.09 | 4.109E+01 | 3.410E-11 |
| 23178 | 40.41 | 4.041E+01 | 2.913E-11 |
| 23251 | 39.88 | 3.988E+01 | 2.583E-11 |
| 23437 | 40.55 | 4.055E+01 | 3.012E-11 |
| 23487 | 41.65 | 4.165E+01 | 3.879E-11 |
| 23621 | 40.72 | 4.072E+01 | 3.129E-11 |
| 23733 | 40.33 | 4.033E+01 | 2.864E-11 |
| 23893 | 41.07 | 4.107E+01 | 3.392E-11 |
| 23968 | 41.91 | 4.191E+01 | 4.113E-11 |
| 24076 | 41.08 | 4.108E+01 | 3.401E-11 |
| 24199 | 40.79 | 4.079E+01 | 3.179E-11 |
| 24303 | 41.65 | 4.165E+01 | 3.879E-11 |
| 24365 | 41.22 | 4.122E+01 | 3.513E-11 |
| 24405 | 40.56 | 4.056E+01 | 3.020E-11 |
| 24470 | 41.65 | 4.165E+01 | 3.879E-11 |
| 24588 | 40.60 | 4.060E+01 | 3.043E-11 |
| 24680 | 40.19 | 4.019E+01 | 2.768E-11 |
| 24794 | 40.84 | 4.084E+01 | 3.215E-11 |
| 24864 | 40.31 | 4.031E+01 | 2.848E-11 |
| 25045 | 41.50 | 4.150E+01 | 3.745E-11 |
| 25066 | 40.86 | 4.086E+01 | 3.234E-11 |
| 25213 | 41.70 | 4.170E+01 | 3.925E-11 |
| 25256 | 41.11 | 4.111E+01 | 3.424E-11 |
| 25431 | 40.18 | 4.018E+01 | 2.762E-11 |
| 25589 | 41.24 | 4.124E+01 | 3.532E-11 |
| 25622 | 40.31 | 4.031E+01 | 2.852E-11 |
| 25807 | 40.29 | 4.029E+01 | 2.835E-11 |
| 25950 | 39.76 | 3.976E+01 | 2.509E-11 |
| 26135 | 40.42 | 4.042E+01 | 2.922E-11 |

| | | | |
|-------|-------|-----------|-----------|
| 26227 | 41.34 | 4.134E+01 | 3.615E-11 |
| 26335 | 40.59 | 4.059E+01 | 3.040E-11 |
| 26358 | 41.99 | 4.199E+01 | 4.195E-11 |
| 26536 | 40.79 | 4.079E+01 | 3.185E-11 |
| 26719 | 42.06 | 4.206E+01 | 4.261E-11 |
| 26737 | 41.30 | 4.130E+01 | 3.576E-11 |
| 26921 | 41.08 | 4.108E+01 | 3.399E-11 |
| 27021 | 40.54 | 4.054E+01 | 3.003E-11 |
| 27158 | 41.80 | 4.180E+01 | 4.018E-11 |
| 27195 | 41.00 | 4.100E+01 | 3.337E-11 |
| 27371 | 40.58 | 4.058E+01 | 3.029E-11 |
| 27492 | 40.89 | 4.089E+01 | 3.252E-11 |
| 27589 | 40.59 | 4.059E+01 | 3.036E-11 |
| 27598 | 41.70 | 4.170E+01 | 3.925E-11 |
| 27673 | 41.15 | 4.115E+01 | 3.459E-11 |
| 27767 | 40.39 | 4.039E+01 | 2.903E-11 |
| 27930 | 40.84 | 4.084E+01 | 3.219E-11 |
| 28016 | 40.26 | 4.026E+01 | 2.819E-11 |
| 28079 | 41.19 | 4.119E+01 | 3.490E-11 |
| 28191 | 40.20 | 4.020E+01 | 2.777E-11 |
| 28293 | 39.74 | 3.974E+01 | 2.499E-11 |
| 28479 | 40.01 | 4.001E+01 | 2.658E-11 |
| 28498 | 39.41 | 3.941E+01 | 2.317E-11 |
| 28518 | 40.94 | 4.094E+01 | 3.292E-11 |
| 28678 | 40.03 | 4.003E+01 | 2.672E-11 |
| 28726 | 39.45 | 3.945E+01 | 2.338E-11 |
| 28779 | 40.99 | 4.099E+01 | 3.330E-11 |
| 28885 | 40.06 | 4.006E+01 | 2.692E-11 |
| 28921 | 39.35 | 3.935E+01 | 2.284E-11 |
| 29041 | 40.89 | 4.089E+01 | 3.253E-11 |
| 29077 | 40.12 | 4.012E+01 | 2.728E-11 |
| 29243 | 39.63 | 3.963E+01 | 2.436E-11 |
| 29334 | 40.17 | 4.017E+01 | 2.761E-11 |
| 29438 | 39.84 | 3.984E+01 | 2.558E-11 |
| 29491 | 41.40 | 4.140E+01 | 3.658E-11 |
| 29630 | 40.17 | 4.017E+01 | 2.757E-11 |
| 29679 | 41.19 | 4.119E+01 | 3.490E-11 |
| 29799 | 40.44 | 4.044E+01 | 2.935E-11 |
| 29858 | 39.93 | 3.993E+01 | 2.609E-11 |
| 29960 | 40.61 | 4.061E+01 | 3.053E-11 |
| 29980 | 39.85 | 3.985E+01 | 2.561E-11 |