```c
for (m = 0; m < M; m++) {
  phiMag[m] = rPhi[m]*rPhi[m] +
              iPhi[m]*iPhi[m];
}

for (n = 0; n < 8*N; n++) {
  for (m = 0; m < M; m++) {
    exp = 2*PI*(kx[m] * x[n] +
                ky[m] * y[n] +
                kz[m] * z[n]);
    rQ[n] += phiMag[m]*cos(exp);
    iQ[n] += phiMag[m]*sin(exp);
  }
}
```