**Steps**

1. Run the Python code
2. Select the folder containing the S parameter (.txt )file
3. Text file format should be as follows

Frequency s11r s11i s21r s21i s12r s12i s22r s22i

1. Data reads from 6th line of the s-parameter file (.txt)

Equations used for calculating EMI shielding effectiveness

Reflectance

Transmittance

Absorbance

Shielding effectiveness of reflection

Shielding effectiveness of absorption

Shielding effectiveness of total

SEM is ignored if

Derived from the following equations

;

|  |  |
| --- | --- |
| EM Shielding efficiency in dB | Shielding Efficiency in percentage |
| 10 dB | 90% |
| 20 dB | 99% |
| 30 dB | 99.9% |
| 40 dB | 99.99% |

Reference: <https://doi.org/10.1007/s40820-023-01058-w>