

Maximum Permissible Exposure Evaluation

Per KDB 447498 D01 v06, simultaneous transmission MPE test exclusion applies when the sum of the MPE ratios for all simultaneous transmitting antennas incorporated in a host device, based on calculated or measured field strengths or power density, is ≤ 1.0 .

The combination of highest simultaneous transmissions on the device are:

Z-Wave: 62.69mW 908.4-916.0MHz (Average)

BTLE: 23.7mW 2402-2480MHz (Average)

$$\frac{62.69}{4 \times \pi \times 20^2} = 0.011 \text{ mW cm}^{-2}$$

$$\frac{23.7}{4 \times \pi \times 20^2} = 0.004 \text{ mW cm}^{-2}$$

The sum of the MPE ratios for all simultaneous transmitting antennas:

$$0.011 + 0.004 = 0.015$$

As the sum of MPE ratios for all simultaneous transmitting antennas is ≤ 1.0 , simultaneous transmission MPE test exclusion will be applied.