

Element Materials Technology Warwick Ltd Unit 1, Pendle Place Skelmersdale West Lancashire WN8 9PN UK P: +44 (0)1695 556 666 info.skelmersdale@element.com element.com

## **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  $\leq$  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)

 $\frac{62.69}{4 \times \pi \times 20^2} = 0.011 \ mW \ cm^{-2}$  $\frac{23.7}{4 \times \pi \times 20^2} = 0.004 \ mW \ cm^{-2}$ 

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  $\leq$  1.0, simultaneous transmission MPE test exclusion will be applied.