RF Exposure

Maximum Permissive Exposure

Performance Criterion (Limits): 1 mW/cm^2

Evaluation Results: Complies

Details: The maximum permissible exposure (MPE) is predicted by using the following equation:

$$S = PG/4\pi R^2$$

where: S = power density (in appropriate units, e.g. mW/cm^2)
P = power input to the antenna (in appropriate units, e.g., mW)
G = power gain of the antenna in the direction of interest relative to an isotropic radiator
R = distance to the center of radiation of the antenna (appropriate units, e.g., cm)

For BLE transmitter: P = 14.52 mW, G = 2 dBi (1.59), R = 20 cm,

$S = [(14.52)*(1.59)]/(4*\pi*20^2) = 0.0046\ mW/cm^2 = 0.046\ W/m^2$

For Wi-Fi 2.4 GHz IEEE 802.11b/g/n transmitter:

$S = 0.018^*\ mW/cm^2 = 0.18\ W/m^2$

FCC:	$\Sigma(S_i/MPE_i) = (0.0046/1) + (0.018/1) = 2.26\ \%$	< 100%
ISED Canada:	$\Sigma(S_i/MPE_i) = (0.046/5.351) + (0.18/5.366) = 4.21\ \%$	< 100%

*: Data was taken from the FCC filing, FCC ID: Z64-CC3220MOD (provided by Spectrum Brands). Intertek takes no responsibility for the accuracy of the data