Maximum Public Exposure to RF (MPE) CFR 15.247 (i), CFR 1.1310 (e) & RSS-102, 2.5.2

The maximum exposure level to the public from the RF power of the EUT shall not exceed a power density, **S**, of 1 mW/cm^2 at a distance, d, of 20 cm from the EUT.

Therefore, for:

Maximum Peak Power (dBm) = 17.82 dBm at 802.11b 2412MHz
Peak Power (Watts) = 0.0605 W
Maximum Gain of Transmit Antenna = 2.0 dBi =1.58, numeric
d = Distance = 20 cm = 0.2 m

S = (PG/ 4 πd^2) = EIRP/4A = 0.0605*(1.58)/4*π*0.2*0.2
=0.0956/0.5030 = 0.1901 W/m^2
= (0.1901 W/m^2) (1m^2/W) (0.1 mW/cm^2)
= 0.01901 mW/cm^2

which is << less than 1.0 mW/cm^2

RSS-102, 2.5.2 Compliance for 2412 MHz ~ 2462 MHz band:

At or above 300 MHz and below 6 GHz and the source based time averaged maximum e.i.r.p. of the device is equal to or less than 1.31 x 10^{-2} f$^{0.6834}$ in Watts (adjusted for tune-up tolerance where applicable), where f = frequency in MHz.

1.31 * 10^{-2} * 2412$^{0.6834}$ = 2.68 W

EUT max EIRP = 17.82 dBm + 2.0 dBi = 19.82 dBm EIRP = 0.0959 W
Which is << than 2.68 W

The MPE limits are below the threshold as stated in KDB447498 D01 V06 in Section 4.3. The calculations above are presented to show that the EUT meets the exclusion requirements.