TÜV Rheinland Group

4.6. Maximum Permissible Exposure MPE and Specific Absorption Rate SAR

Prüfgrundlage [test bases]:

FCC Part 1.1307 … 1.1311
FCC Part 2.1091, 2.1093
FCC Part 15.247 (b) (4)
FCC Part 15.247 (i)
Industry Canada RSS-102
Health Canada Safety Code 6

Max Permissible Exposure MPE

EIRP = P * G
P = Peak outp. power (mW)
G = Antenna Gain (num.)

1 dBm = 1,26mW (measured, Testreport Chapter 4.4)

2,12 dBm = 1,629mW (worst case, BTm_Part1.pdf page 2)

Frequency: 2,45GHz (> 1,5GHz)

Max allowable Power Density W_{Limit}: 1,0 mW / cm^2 (General Population, Uncontrolled Exposure)

Minimum/Safe Distance r_{min} = $[EIRP / (4 * Pi * W_{Limit})]^{0,5}$

= 0,32cm (measured)
= 0,36cm (worst case)

Specific Absorption Rate SAR

The tested terminal Braille TRIO is a so called mobile device, distance between this device and any human body is > 20cm. Evaluation therefore is not requested for distances > 20cm.