

RF Exposure Evaluation

REQUIREMENT

KDB 447498 D04 Interim General RF Exposure Guidance v01

Appendix B Exemptions for Single RF Sources

B.3 MPE-based Exemption and B.4 SAR-based Exemption:

$$P_{th} \text{ (mW)} = ERP_{20 \text{ cm}} \text{ (mW)} = \begin{cases} 2040f & 0.3 \text{ GHz} \leq f < 1.5 \text{ GHz} \\ 3060 & 1.5 \text{ GHz} \leq f \leq 6 \text{ GHz} \end{cases} \tag{B.1}$$

$$P_{th} \text{ (mW)} = \begin{cases} ERP_{20 \text{ cm}} (d/20 \text{ cm})^x & d \leq 20 \text{ cm} \\ ERP_{20 \text{ cm}} & 20 \text{ cm} < d \leq 40 \text{ cm} \end{cases} \tag{B.2}$$

where

$$x = -\log_{10} \left(\frac{60}{ERP_{20 \text{ cm}} \sqrt{f}} \right)$$

f is in GHz, d is the separation distance (cm), and $ERP_{20 \text{ cm}}$ is per Formula (B.1).

TEST RESULT

☒ Passed ☐ Not Applicable

Radio Type	Frequency (MHz)	Conducted Power(dBm)	Conducted Maximum Tune-up(dBm)	Ant Gain(dBi)	Maximum ERP/EIRP (dBm)	Maximum ERP/EIRP (mW)	Minimum Separation Distance(cm)	Pth (mW)
Bluetooth	2402	2.98	3.00	0.5	3.5	2.239	1.0	10..39

Note:

1) The safety distance for body exposure assessment is 1.0cm