

## 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:

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

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

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**

Band	Conducted Maximum Tune-up (dBm)	Ant Gain (dBi)	ERP (dBm)	ERP (mW)	Minimum Separation Dis. (cm)	Pth (mW)
LTE Cat M band 2	21.00	3.00	21.85	153.11	4.0	156.30
LTE Cat M band 4	20.50	3.00	21.35	136.46	3.7	139.59
LTE Cat M band 12	22.50	3.00	23.35	216.27	4.7	217.88
LTE Cat M band 13	21.50	3.00	22.35	171.79	4.0	175.47
LTE Cat M band 25	21.50	3.00	22.35	171.79	4.3	178.50

Note:

*The safety distance for body exposure assessment is 4.7cm.*