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:

$$P_{\rm th} \,({\rm mW}) = ERP_{20\,\,{\rm cm}} \,({\rm mW}) = \begin{cases} 2040f & 0.3\,\,{\rm GHz} \le f < 1.5\,\,{\rm GHz} \\ \\ 3060 & 1.5\,\,{\rm GHz} \le f \le 6\,\,{\rm GHz} \end{cases}$$
(B.1)
$$(ERP_{20\,\,{\rm cm}}(d/20\,\,{\rm cm})^x \quad d \le 20\,\,{\rm cm}$$

$$P_{\rm th} \,({\rm mW}) = \begin{cases} \\ ERP_{20\,\rm cm} & 20\,\rm cm < d \le 40\,\rm cm \end{cases}$$
(B.2)

where

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

f is in GHz, d is the separation distance (cm), and ERP_{20cm} 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	23.00	-3.00	17.85	60.954	2.5	66.526
LTE Cat M band 4	23.00	-3.00	17.85	60.954	2.5	68.932
LTE Cat M band 5	23.00	-3.00	17.85	60.954	2.0	66.098
LTE Cat M band 12	23.00	-3.00	17.85	60.954	2.0	71.765
LTE Cat M band 13	23.00	-3.00	17.85	60.954	2.0	68.068

Note:

The safety distance for body exposure assessment is 2.5cm.