
FCC §2.1093 - RF EXPOSURE INFORMATION

Applicable Standard

According to KDB 447498 D01 General RF Exposure Guidance v06, clause 4.3. General SAR test exclusion guidance:

- c) For frequencies below 100 MHz, the following may be considered for SAR test exclusion (also illustrated in Appendix C):
- 1) For test separation distances > 50 mm and < 200 mm, the power threshold at the corresponding test separation distance at 100 MHz in step b) is multiplied by $[1 + \log(100/f(\text{MHz}))]$
 - 2) For test separation distances ≤ 50 mm, the power threshold determined by the equation in c) 1) for 50 mm and 100 MHz is multiplied by $\frac{1}{2}$
 - 3) SAR measurement procedures are not established below 100 MHz.

Test Result

$$P_{th} = [474 * (1 + \log(100/f_{(\text{MHz})}))] / 2 = 443 \text{ mW}.$$

$$E[\text{dB}\mu\text{V/m}] = \text{EIRP}[\text{dBm}] + 95.2$$

$$E[\text{dB}\mu\text{V/m}] = 70.56 \text{ dB}\mu\text{V/m} @ 3\text{m},$$

$$\text{EIRP} = 70.56 \text{ dB}\mu\text{V/m} - 95.2 = -24.64 \text{ dBm} = 0.0034 \text{ mW} < 443 \text{ mW}$$

So the NFC SAR evaluation can be compliance.