

RF Exposure Analysis

FCC §2.1093

Compliance with the SAR requirements is considered without testing because the RF power of channel is below SAR Test Exclusion Threshold. The SAR Test Exclusion Threshold (TET in mW) was calculated according to the KDB 447498, Sec 4.3.1.1 using formula:

$$\text{TET} = [(\text{max. power of channel, mW}) / (\text{min. separation, mm, d})] \times [\sqrt{f_{(\text{GHz})}}]$$

Where d = 5 mm – the minimum test separation distance.

At f = 2.442 GHz,

$$\text{Power}_{(\text{eirp, dBm})} = 100.28_{(\text{dBuV/m @ 3m})} - 95.3 = 4.98_{(\text{dBm})} = 3.15 \text{ mW}$$

$$\begin{aligned} \text{TET} &= [(3.15 \text{ mW}) / (5 \text{ mm})] \times [\sqrt{2.442_{(\text{GHz})}}] \\ &= 0.98 \quad (\leq 3.0 \text{ and } \leq 7.5) \end{aligned}$$

Results	Complies
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ISED RSS-102

With the EUT power of 0.798 mW, compliance with the SAR requirements is considered without testing because the RF power of channel is below SAR exemption limits of 4 mW at 2.45 GHz and 5 mm separation.

Results	Complies
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