

SAR test exclusion

According to KDB 447498 D01 General RF Exposure Guidance v05, section 4.3.1

At 100 MHz to 6 GHz and for test separation distances \leq 50 mm, the SAR test exclusion threshold is determined according to the following;

a) $[(\text{max. power of channel, including tune-up tolerance, mW}) / (\text{min. test separation distance, mm})] \times [\sqrt{f(\text{GHz})}] \leq 3.0$

1. SAR test exclusion threshold

Frequency : 2 475 MHz (min. separation distances = 5 mm)

SAR test exclusion thresholds(5 mm) = $[(0.32 / 5) * \sqrt{2.405}] = 0.0992 \leq 3.0$.

Mode	Frequency (MHz)	Tune up output Power (dBm)	Measured max output Power (dBm)	Separation Distance (mm)	≤ 3.0
DSSS	2 405	-7.0±2	-5.56	5	0.0993
DSSS	2 440	-7.0±2	-6.18	5	0.1000
DSSS	2 475	-7.0±2	-6.51	5	0.1007

[Tune up power, dBm] = [Target power, dBm \pm tune up tolerance, dBm]

Maximum tuned up power = $(-7.0 \text{ dBm} \pm 2 \text{ dBm}) = -5.0 \text{ dBm} = 0.32 \text{ mW}$

Measured max output power = -5.56 dBm

2. Conclusion : SRD (DSSS) SAR was not required

Note : This EUT of RFID does not exceed for Appendix C of KDB 447498.