

RF Exposure Information.

References: *TCB Training Document*, Session 6, May12-16 2003,
TCB Exclusion List, Appendix A, footnote #3, general population low threshold levels, at distances $\geq 2.5\text{cm}$, revised 17 July 2002.

The TCB training document, states that TCB Excl List low thresholds are not appropriate for compliance demonstration of fixed devices, but are used as a secondary check on MPE levels.

This document shows that for a transmit duty factor of 7.0%, the worst-case source based time averaged output power from the RT-2200 is 27.748mW below the limits imposed by the referenced TCB Exclusion list.

Typically, the RT-2200 operates with a duty factor of 0.3%. However, given a worst-case scenario of network power outage reporting and clearing of accumulated messages followed by a typical transmit occurring within the same 30-minute period, the duty factor would be 7.0%.

Table 1 Radiated Output Power for a RT-2200 with 7.0% Duty Factor.

Measured output power from Protocol-EMC Test Report.	$\text{Power} := \frac{10^{\frac{36.5 \text{ dBm}}{10}}}{1000}$	Power = 4.467W
Source based time averaged output power of RT-2200.	DF := 7.0% Gain _{ant} = 1.64 ERIP := Power · DF · Gain _{ant}	ERIP = 512.793mW
Source based time averaged output power Low threshold limit.	Threshold _{TCB_excl_list} := $\frac{120}{.222}$ · mW	Threshold _{TCB_excl_list} = 540.541mW
Margin below the Low Threshold limit.	margin := Threshold _{TCB_excl_list} - ERIP	margin = 27.748mW