

30 September 2011

RF exposure calculation for FCC ID:LW9-CS2400TR, IC ID:2119B-CS2400TR

RF Exposure Calculations:

This device meets the output power threshold in KDB 447498 of $60/f(\text{GHz})$ in which case no SAR or RF exposure evaluation is required.

RF Power Measurement

Frequency (MHz)	Maximum conducted power output (mW)	Maximum EIRP (mW)
2405.50	9.09	13.27

Power Limit = $60/f$ (mW)	24.95
Frequency (f) (GHz)	2.405

Notes:

1. Output power was measured in peak output power. Because it can be assumed that the time-averaged output power as specified in KDB 447498 will be less than a peak output power, compliance with the limit can be presumed.
2. Maximum conducted power output and the maximum field strength at 3 meters was taken from NCEE Labs report R041211-01-01A.

$\text{EIRP (mW)} = \text{Conducted Output Power (mW)} \times \text{Gain}$

Gain = 1.64 (2.14dBi)

References:

1. FCC OET Bulletin 65, Edition 97-01
2. FCC Supplement C to OET Bulletin 65, edition 01-01
3. IEEE C95.1, 1999
4. KDB 447498