

1.0 Exposure Exemption Evaluation

The results of power measurement and intended use/proximity are compared against the requirements for safety of RF exposure.

1.2 Criteria

Section Reference	Date
2.1091, FCC OET Bulletin 65, KDB 447498 Section 4.3.1	2014-04-26

1.3 Procedure

Using measurement of peak power and intended application, determine the permissible exposure level or whether additional exposure tests (SAR) are indicated. Justify conclusion for selected exposure area and separation distance.

1.4 Exemption Calculation

Antenna for this device is a short quarter-wave whip antenna that attaches by right-angle BNC connector to the rear surface of the EUT. The operating frequency is 467.75 MHz.

The required separation for the frequency and power is determined from KDB 447498 Section 4.3.1.2 and restated as follows:

KDB 447498 Clause 4.3.1.2 (but using Annex B approximations)						
MHz	50	60	70	80	90	100 mm
450	224	254	284	314	344	374 mW
468	221	252	284	315	346	377 mW
835	164	220	275	331	387	442 mW
MHz	50	60	70	80	90	100 mm
450	560	635	710	785	860	935 mW
468	553	631	709	787	865	943 mW
835	410	550	688	828	968	1105 mW

Using the above values, the distance is calculated as follows:

MHz	70	71	72	73	74	75	76	77	78	79	80 mm
468	709	717	725	732	740	748	756	764	771	779	787 mW

The following page includes photographs to illustrate the measured distance from the antenna to the user hand. The measured distance is 105 mm.

The EUT therefore meets the criteria for exclusion from SAR testing.

1.5 Photograph



Antenna to Hand Distance 105 mm

Measured from nearest surface of antenna, across top of enclosure and to nearest edge of nearest button (F2) in the user keypad area.
