

Radiofrequency radiation exposure evaluation: mobile devices

RESULT :

Pass

Test Specification

Test item	:	Steam Sterilizer
Identification / Type No.	:	T-TOP 10, T-TOP 11
FCC ID	:	2BDBV-TTOP10-11
Test standard	:	CFR47 FCC Part 2: Section 2.1091 CFR47 FCC Part 1: Section 1.1310 FCC KDB Publication 447498 D04

➤ FCC requirements

FCC requirement: Systems operating under the provisions of this section shall be operated in a manner that ensures that the public is not exposed to radio frequency energy level in excess limit for maximum permissible exposure. In accordance with 47 CFR FCC Part 2 Subpart J, section 2.1091 this device has been defined as a mobile device whereby a distance of 20cm normally can be maintained between the user and the device.

MPE Calculation Method according to KDB 447498 D04

TABLE B.1—THRESHOLDS FOR SINGLE RF SOURCES
SUBJECT TO ROUTINE ENVIRONMENTAL EVALUATION

RF Source Frequency		Minimum Distance			Threshold ERP
f_L MHz	f_H MHz	$\lambda_L / 2\pi$		$\lambda_H / 2\pi$	W
0.3	—	1.34	159 m	—	35.6 m
1.34	—	30	35.6 m	—	1.6 m
30	—	300	1.6 m	—	159 mm
300	—	1,500	159 mm	—	31.8 mm
1,500	—	100,000	31.8 mm	—	0.5 mm
					19.2R ²

Subscripts L and H are low and high; λ is wavelength.
From § 1.1307(b)(3)(i)(C), modified by adding Minimum Distance columns.

a) EUT RF Exposure Evaluation operations, Worst Case mode

Test Mode	Measured Power (dBm)	Antenna Gain (dBi)	Measured e.i.r.p (dBm)	Measured e.i.r.p (mW)	Minimum Separation Distances (cm)	Limit (mW)
2.4GHz band Wi-Fi	18.03	1.54	19.57	90.57	20	768