

US Tech Test Report:

FCC ID:

Test Report Number:

Issue Date:

Customer: OKYANUS TEKNOLOJİ BİLGİSAYAR VE YAZILIM SAN. TIC.LTD.STI.

Model:

FCC Part 15 Certification

2AUFI-FT-05DC

19-0285

September 20, 2019

FT-05DC

Maximum Public Exposure to RF (MPE) CFR 15.247 (i), CFR 1.1310 (e)

The maximum exposure level to the public from the RF power of the EUT shall not exceed a power density, **S** as per the respective limits in Table 1 below, at a distance, **d**, of 20 cm from the EUT.

TABLE 1—LIMITS FOR MAXIMUM PERMISSIBLE EXPOSURE (MPE)

Frequency range (MHz)	Electric field strength (V/m)	Magnetic field strength (A/m)	Power density (mW/cm ²)	Averaging time (minutes)
Limits for General Population/Uncontrolled Exposure				
0.3-1.34	614	1.63	*100	30
1.34-30	824/f	2.19/f	*180/f ²	30
30-300	27.5	0.073	0.2	30
300-1,500			f/1500	30
1,500-100,000			1.0	30

f = frequency in MHz * = Plane-wave equivalent power density

Therefore, for:

MPE for 2400 MHz – 2483.5 MHz

Limit: 1 mW/cm²

Peak Power (dBm) = 19.95 dBm

Peak Power (Watts) = 0.099 W

Gain of Transmit Antenna = 2.0 dB_i = 1.58, numeric

d = Distance = 20 cm = 0.2 m

$$\begin{aligned} \mathbf{S} &= (\mathbf{P}\mathbf{G} / 4\pi\mathbf{d}^2) = \mathbf{EIRP}/4\mathbf{A} = 0.099*(1.58)/4*\pi*0.2^2*0.2 \\ &= 0.1569/0.5030 = 0.3119 \text{ W/m}^2 \\ &= (0.3119 \text{ W/m}^2) (1\text{m}^2/\text{W}) (0.1 \text{ mW/cm}^2) \\ &= 0.03119 \text{ mW/cm}^2 \end{aligned}$$

which is << less than S = 1 mW/cm²