US Tech Test Report:	FCC Part 15.247 Certification
FCC ID:	2BFVO-CAPMDSEN
IC:	N/A
Test Report Number:	24-0113
Issue Date:	August 27, 2024
Customer:	GE Grid Solutions
Model:	Cap MD

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 (Mobile condition) 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: 1.0 mW/cm^2
Peak Power (dBm) = +4 dBm (rated)
Peak Power (Watts) = 0.0025 W
Gain of Transmit Antenna = +3.2 dB$_i$ = 2.09 numeric (Highest Gain)
d = Distance = 20 cm = 0.2 m

$$S = (PG/ 4\pi d^2) = EIRP/4A = 0.0052 (2.09)/4*\pi*0.2*0.2$$
$$= 0.0052/0.5030 = 0.0104 \text{ W/m}^2$$
$$= (0.0104 \text{ W/m}^2) (1m^2/W) (0.1 \text{ mW/cm}^2)$$
$$= 0.00104 \text{ mW/cm}^2$$

which is << less than S = 1.0 mW/cm^2