The Device is a **mobile** Meeting Room Display Tablet for IoT applications. Meeting Room Display Tablet is suitable for commercial and residential indoor application.

Meeting Room Display Tablet evaluated for RF radiation exposure according to the provisions of FCC §2.1091, MPE guidelines identified in FCC §1.1310 and FCC KDB 447498:2015.

Limits for General Population/Uncontrolled Exposure: 47 CFR 1.1310 Table 1 (B)

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)
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

Where f is in MHz

The worst-case scenario is provided at 902 MHz.

The maximum power density exposure is:

S = 0.60133 mW/cm^2, for uncontrolled exposure

LoRa RF conducted power measurement and antenna gain as per ETC test reports t29e20a138-DTS_FCC and t29e20a138-DSS_FCC section 2.3.5 are reported below. The maximum duty cycle of the radio is stated in the Operation Description exhibit to be 33%. The worst case value is in bold below

TX	Frequency (MHz)	Conducted RF Output 100% Duty Cycle (dBm)	Max. antenna gain (dBi)	Conducted EIRP 100% duty Cycle(dBm)	EIRP 100% Duty Cycle (mW)	EIRP 33% Duty Cycle (mW
LoRa 500 KHz	903	13.57	0	13.57	22.751	7.5075
	907.8	13.78	0	13.78	23.8781	7.887
	914.2	14.41	0	14.41	27.6058	9.1113
LoRa 125 KHz	902.3	12.93	0	12.93	19.6336	6.4779
	908.5	13.34	0	13.34	21.5774	7.1214
	914.9	**14.42**	**0**	**14.42**	**27.6694**	**9.130902**

Using worst case scenario, the highest measured EIRP or [P*G(numeric gain)] value for the LoRa transmitter was rounded up to **9.131 mW**.

Using the highest transmitted power general equation, at a distance of 20 cm

$$S = EIRP / (4 \pi R^2)$$

Where: S, power density in 'mW/cm^2' (we use the value for the LoRa band of 0.60153 W/m^2)
  EIRP, Effective Isotropic Radiated Power in 'mW'
  R, distance to the center of the radiation of the antenna in 'cm'

The RF exposure from the radio is less than the limit specified as shown below and meets the exemption criteria.

0.001816554 mW/cm^2 = (9.131 mW) / (4 x π x 20²)

S = 0.00182 mW/cm^2 <<< 0.60133 mW/cm^2 (max limit)

In addition, we re-arrange the above equation to determine the minimum safe distance.

$$R = \sqrt{[EIRP / (4 \pi S)]}$$

0.015519765 = √ [0.00182mW / (4x π x0.60133mw/cm²)]

R =   0.01552 cm, for uncontrolled exposure (rounded up to the first decimal)

The manufacturer manual specified a minimum safe distance of **20 cm**.