R.F Exposure/Safety/MPE Report

For Tyto Care Ltd.

FCC ID: 2AHKN-5G2

IC: 26056-5G2

NII- 5GHz

The device's intended use is to operate in a user home environment, linked to the home router, allowing a two way video call and upload of files to the network.

The typical distance between the E.U.T. and the user is at least 20cm.

Transmission occurs when the device is placed on a surface.

Calculation of Maximum Permissible Exposure (MPE)

Based on 47CFR1 Section 1.1307(b)(1) and RSS 102 Issue 5, Table 4 Requirements

(a) FCC Limit at 5240 MHz is:

$$1\frac{mW}{cm^2}$$

Using Table 1 of 47CFR1 Section 1.1310 limit for general population/uncontrolled exposures, the above levels are an average over 30 minutes.

- (b) ISED Limit: $300\text{-}6000\text{MHz} = 0.02619 f^{0.6834} \text{ W/m}^2 = 0.02619 \times 5240^{0.6834} = 0.02619 \times 348.2 = 9.12 \text{ W/m}^2 = 0.912 \text{ mW/cm}^2$
- (c) The power density produced by the E.U.T. is:

$$S = \frac{P_t G_t}{4\pi R^2}$$

 P_t = Conducted Transmitted Power 12.9 dBm = 19.5 mW

 G_t = Antenna Gain 4dBi = 2.51 numeric

R = Distance From Transmitter 20 cm

(d) The peak power density produced by the E.U.T. is:

$$S = 19.5*2.51/4\pi(20)^2 = 0.0097 \text{ mW/cm}^2$$

(e) This is below the FCC/ISED limit.