

Vayyar Imaging LTD.

FCC ID: 2AHIS-VMakerPROUWB

### RF exposure information according to KDB 447498 D01 guidance

The EUT, VMAKERPROUWB product, is used as a modular transmitter operating in 6000 – 8500 MHz band. It is equipped with an internal printed antenna.

#### Maximum measured transmitter power obtained from test report VAYRAD\_FCC\_15.519.46976:

P <sub>out</sub> EIRP		Maximum antenna gain, dBi	P <sub>out</sub> conducted	
dBm	mW		dBm	mW
-6.22	0.23	4	-10.22	0.095

The SAR Test Exclusion Thresholds of the guidance is limited only up to 6 GHz. According to FCC §2.1093 the portable device operating at frequencies above 6 GHz is evaluated in terms of MPE limits.

Since the EUT is an UWB device to cover the frequency range of the EUT above 6 GHz, the MPE will be used as per general guidance for Mobile devices.

Compliance shall be made at minimum separation distance applicable to the operating configurations and exposure conditions of the device consistent with the FCC §2.1093.

The calculation for hand-held portable device that can be used in close proximity to extremities, at the minimum separation distance of 5 mm is given below:

Limit for power density for general population/uncontrolled exposure is 1 mW/cm<sup>2</sup> for

1500 - 100000 MHz frequency range.

The power density  $P \text{ (mW/cm}^2\text{)} = P_T / 4\pi r^2$ , where

$P_T$  is the transmitted power, which is equal to the peak transmitter output power (-10.22) dBm plus maximum antenna gain 4 dBi, the maximum equivalent isotropically radiated power

EIRP is -6.22 dBm = 0.23 mW

The power density at 5 mm calculated as follows:

$$0.23 \text{ mW} / 4\pi (0.5 \text{ cm})^2 = 0.07 \text{ mW/cm}^2 \ll 1 \text{ mW/cm}^2$$

General public cannot be exposed to dangerous RF level.