HERMON LABORATORIES

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_15.519.39637:

Pout EIRP		Maximum antenna gain, dBi	Pout conducted	
dBm	mW		dBm	mW
-8.49	0.14	4	-12.49	0.06

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 a minimum distance of 5 cm consistent with the FCC §2.1093.

According to FCC §2.1093 evaluation at a distance of less than 5 cm is not required.
But as the device will be used in a hand-held portable device and can be used in close proximity to extremities, additional calculation at distance in 5 mm is given below

Limit for power density for general population/uncontrolled exposure is 1 mW/cm^2 for

1500 -100000 MHz frequency range.

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

P_T is the transmitted power, which is equal to the peak transmitter output power (-12.49) dBm plus maximum antenna gain 4 dBi, the maximum equivalent isotropically radiated power

EIRP is -8.49 dBm = 0.14 mW

The power density at 50 mm calculated as follows:

$0.14\ mW / 4\pi\ (5\ cm)^2 = 0.00044\ mW/cm^2 << 1\ mW/cm^2$

The power density at 5 mm calculated as follows:

$0.14\ mW / 4\pi\ (0.5\ cm)^2 = 0.044\ mW/cm^2 << 1\ mW/cm^2$

General public cannot be exposed to dangerous RF level.