

# MPE/RF EXPOSURE REPORT



Evaluation of: Nanit N151 Smart Baby Monitor

To: FCC CFR 47 Part 1.1310

Report Serial No.: UDIS01-U9 Rev A FCC MPE

This report supersedes: NONE

Applicant: UdiSense Inc. (DBA: Nanit)  
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**Product Function:** Wireless Video Baby Monitor

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## **This Report is Issued Under the Authority of:**

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## 1. MAXIMUM PERMISSABLE EXPOSURE

### Calculations for Maximum Permissible Exposure Levels

$$\text{Power Density} = P_d \text{ (mW/cm}^2\text{)} = \text{EIRP}/(4*\pi*d^2)$$

$$\text{EIRP} = P * G$$

P = Peak output power (mW)

G = Antenna numeric gain (numeric)

d = Separation distance (cm)

$$\text{Numeric Gain} = 10 \wedge (\text{G (dBi)}/10)$$

The calculations in the table below use the highest measured conducted power values together with the antenna gain specified for the EUT. These calculations represent worst case in terms of the exposure levels.

### Specification - Maximum Permissible Exposure Limits.

The Limit is defined in Table 1 of FCC §1.1310.

| Freq. Band (MHz)    | Ant Gain (dBi) | Numeric Gain (numeric) | Peak Output Power (dBm) | Peak Output Power (mW) | Calculated Power Density (mW/cm <sup>2</sup> ) @ 20cm | Power Density Limit (mW/cm <sup>2</sup> ) | Min Calculated safe distance for Limit (cm) | Calculated Power Density (mW/cm <sup>2</sup> ) @ Safe Distance |
|---------------------|----------------|------------------------|-------------------------|------------------------|---|---|---|--|
| 2400 – 2483.5 (BLE) | 5.42           | 3.48                   | 7.29                    | 5.36                   | 0.004   | 1.0                                       | 1.22  | 0.0037   |
| 2400 – 2483.5 (DTS) | 5.42           | 3.48                   | 17.00                   | 50.12                  | 0.035   | 1.0                                       | 3.73  | 0.0347   |
| 5150-5850           | 4.69           | 2.94                   | 17.66                   | 58.34                  | 0.03  | 1.0                                       | 3.70  | 0.0342   |

Note: For mobile or fixed location transmitters the minimum separation distance is 20cm even if calculations indicate the MPE distance to be less.



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