



RF EXPOSURE EVALUATION REPORT

FCC ID : 2AIWVN302
Equipment : Nanit Pro Baby Monitor
Brand Name : Nanit
Model Name : N302
Applicant : Udisense Inc. DBA: Nanit
244 Fifth Avenue Suite #2702, New York, NY, United States 10001
Manufacturer : Udisense Inc. DBA: Nanit
244 Fifth Avenue Suite #2702, New York, NY, United States 10001
Standard : 47 CFR Part 2.1091

We, SPORTON INTERNATIONAL INC has been evaluated this product in accordance with 47 CFR Part2.1091 and it complies with applicable limit. Sporton Lab is accredited to ISO 17025 by Taiwan Accreditation Foundation (TAF code: 1190) and the FCC designation No. TW1190 under the FCC 2.948(e) by Mutual Recognition Agreement (MRA) in FCC evaluation.

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Cona Huang
Approved by: Cona Huang / Deputy Manager



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History of this test report



1. Description of Equipment Under Test (EUT)

Product Feature & Specification	
EUT Type	Nanit Pro Baby Monitor
Brand Name	Nanit
Model Name	N302
FCC ID	2AIWVN302
Wireless Technology and Frequency Range	WLAN 2.4GHz Band: 2400 MHz ~ 2483.5 MHz WLAN 5.2GHz Band: 5150 MHz ~ 5250 MHz WLAN 5.3GHz Band: 5250 MHz ~ 5350 MHz WLAN 5.5GHz Band: 5470 MHz ~ 5725 MHz WLAN 5.8GHz Band: 5725 MHz ~ 5855 MHz Bluetooth: 2400 MHz ~ 2483.5 MHz
Mode	WLAN: 802.11a/b/g/n/ac HT20/HT40/VHT20/VHT40/VHT80 Bluetooth BR/EDR/LE
HW Version	20H000-7
SW Version	4.9.202
EUT Stage	Production Unit

Remark: The above EUT's information was declared by manufacturer. Please refer to the specifications or user's manual for more detailed description.

Reviewed by: Jason Wang

Report Producer: Daisy Peng

2. Maximum RF average output power among production units

Band / Channel / Frequency (MHz)	Maximum Average Power (dBm)
Bluetooth	13.16
2.4GHz WLAN	16.84
5.2GHz WLAN	14.95
5.3GHz WLAN	16.91
5.5GHz WLAN	16.67
5.8GHz WLAN	16.56



3. RF Exposure Limit Introduction

According to ANSI/IEEE C95.1-1992, the criteria listed in Table 1 shall be used to evaluate the environmental impact of human exposure to radio frequency (RF) radiation as specified in §1.1310.

Frequency range (MHz)	Electric field strength (V/m)	Magnetic field strength (A/m)	Power density (mW/cm ²)	Averaging time (minutes)
(A) Limits for Occupational/Controlled Exposures				
0.3-3.0	614	1.63	*(100)	6
3.0-30	1842/f	4.89/f	*(900/f ²)	6
30-300	61.4	0.163	1.0	6
300-1500			f/300	6
1500-100,000			5	6
(B) Limits for General Population/Uncontrolled Exposure				
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
300-1500			f/1500	30
1500-100,000			1.0	30

The MPE was calculated at 20 cm to show compliance with the power density limit.

The following formula was used to calculate the Power Density:

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

Where:

S = Power Density

P = Output Power at Antenna Terminals

G = Gain of Transmit Antenna (linear gain)

R = Distance from Transmitting Antenna



4. Radio Frequency Radiation Exposure Evaluation

4.1. Standalone Power Density Calculation

Band	Antenna Gain (dBi)	Maximum Power (dBm)	Maximum EIRP (dBm)	Maximum EIRP (W)	Average EIRP (mW)	Power Density at 20cm (mW/cm^2)	Limit (mW/cm^2)	Power Density / Limit
WLAN 2.4GHz Band	3.90	16.84	20.7	0.12	118.58	0.024	1.000	0.024
WLAN 5.2GHz Band	4.50	14.95	19.5	0.09	88.10	0.018	1.000	0.018
WLAN 5.3GHz Band	4.50	16.91	21.4	0.14	138.36	0.028	1.000	0.028
WLAN 5.5GHz Band	3.90	16.67	20.6	0.11	114.02	0.023	1.000	0.023
WLAN 5.8GHz Band	3.00	16.56	19.6	0.09	90.36	0.018	1.000	0.018
Bluetooth	2.00	13.16	15.2	0.03	32.81	0.007	1.000	0.007

WLAN Power Density / Limit	Bluetooth Power Density / Limit	Σ (Power Density / Limit) of WLAN + Bluetooth
0.028	0.007	0.035

Note:

1. Σ (Power Density / Limit): This is a summation of [(power density for each transmitter/antenna included in the simultaneous transmission)/ (corresponding MPE limit)], for WLAN + Bluetooth.
2. Considering the WLAN module collocation with the Bluetooth transmitter of the EIRP performance listed in the table above, the aggregated (power density /limit) is smaller than 1, and MPE of 2 collocated transmitters is compliant

Conclusion:

According to 47 CFR §1.1307, the RF exposure analysis concludes that the RF Exposure is FCC compliant.