



A Test Lab Techno Corp.

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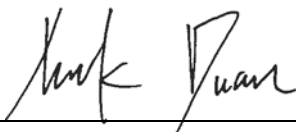


MPE Report

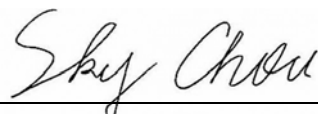
Test Report No.	: 1708FS24-01
Applicant	: NoNap.Play Inc.
Product Type	: Totokan baby monitor
Trade Name	: Totokan
Model Number	: TTK0088001
Date of Received	: Jul. 20, 2017
Test Period	: Jul. 27, 2017
Date of Issued	: Sep. 04, 2017
Test Specification	: ANSI / IEEE Std.C95.1-1992 / IEEE Std. 1528-2013 47 CFR § 2.1091 47 CFR § 1.1310
Location of Test Lab.	: Chang-an Lab.

1. The test operations have to be performed with cautious behavior, the test results are as attached.
2. The test results are under chamber environment of A Test Lab Techno Corp. A Test Lab Techno Corp. does not assume responsibility for any conclusions and generalizations drawn from the test results with regard to other specimens or samples.
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Approved By

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(Mark Duan)

Tested By

: 
(Sky Chou)



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1. Description of Equipment under Test (EUT)

Applicant	NoNap.Play Inc. #10 Keelung Road Section 2, 15th Floor Taipei, Taiwan 110	
Manufacturer	NoNap.Play Inc. #10 Keelung Road Section 2, 15th Floor Taipei, Taiwan 110	
Product Type	Totokan baby monitor	
Trade Name	Totokan	
Model Number	TTK0088001	
FCC ID	2AM8W-TTK001	
Frequency Range	Operate Band	Frequency Range (MHz)
	IEEE 802.11b / 802.11g IEEE 802.11n 2.4GHz 20MHz	2412 - 2462
	IEEE 802.11n 2.4GHz 40 MH	2422 - 2452
Antenna information	Type	Max. Gain (dBi)
	PIFA Antenna	1.5
	Directional Gain (refer to RF report)	4.51
Antenna Delivery	IEEE 802.11b/IEEE 802.11g: 1TX / 1RX (Diversity) IEEE 802.11n 2.4GHz 20MHz/40MHz: 2TX / 2RX (MIMO)	
RF Evaluation	0.022 mW/cm ²	
Temperature Range	0 ~ 40°C	

The above equipment was tested by A Test Lab Techno Corp. For compliance with the requirements set forth in 47 CFR § 2.1091 / 47 CFR § 1.1310. The results of testing in this report apply only to the product/system, which was tested. Other similar equipment will not necessarily produce the same results due to production tolerance and measurement uncertainties



2. Human Exposure Assessment

Due to the design and installation of this product, it is not possible to conduct SAR evaluation. This is because client either manufactures or supplies the antenna(s) that will be used in the installation of this product. Therefore, this product will be evaluated as a mobile device per 47 CFR § 1.1310 titled "Radiofrequency radiation exposure limits", generally referred to as MPE limits.

In 47 CFR § 2.1091, paragraph (b) defines a mobile device as "a transmitting device designed to be used in other than fixed locations and to generally be used in such a way that a separation distance of at least 20 cm is normally maintained between the transmitter's radiating structure(s) and the body of the user or nearby persons. " This product is intended to be installed into a vehicle such that the unit is physically secured at one location. In the installation guide supplied with the product,

Client has made the following statement: "IMPORTANT: To meet the FCC's RF Exposure Guidelines, the antenna should be installed so there is at least 20 cm of separation between the body of the user and nearby persons and the antenna". Based on the installation of the transceiver and the antenna, the transmitters radiating structure is more than 20 cm from the user. Thus, this product is a "mobile device" as defined in section § 2.1091 paragraph (b).

Exposure evaluation
$S = \frac{PG}{4\pi R^2}$ Where S: power density P: power input to the antenna G: power gain of the antenna in the direction of interest relative to an isotropic radiator. R: distance to the center of radiation of the antenna.

3. RF Output Power

The conducted power turn-up tolerance reference manufacturer specification.

Band	Data Rate (Mbps)	Frequency (MHz)	Average Conducted power		
			ANT-0	ANT-1	ANT-0+1
IEEE 802.11b	1	2412.0	11.65	11.09	---
		2437.0	9.12	9.04	---
		2462.0	8.92	8.05	---
	2	2437.0	9.10	9.02	---
	5.5	2437.0	9.09	8.98	---
	11	2437.0	9.05	8.95	---
IEEE 802.11g	6	2412.0	10.77	10.74	---
		2437.0	12.01	11.37	---
		2462.0	13.47	12.81	---
	9	2437.0	12.00	11.35	---
	12	2437.0	11.98	11.33	---
	18	2437.0	11.95	11.32	---
	24	2437.0	11.94	11.30	---
	36	2437.0	11.91	11.29	---
	48	2437.0	11.90	11.27	---
IEEE 802.11n 2.4GHz 20MHz	13	2412.0	12.50	12.30	15.41
		2437.0	11.91	11.16	14.56
		2462.0	12.91	12.36	15.65
	28.8	2437.0	11.90	11.15	14.55
	43.4	2437.0	11.88	11.13	14.53
	57.8	2437.0	11.86	11.12	14.52
	86.6	2437.0	11.85	11.10	14.50
	115.6	2437.0	11.83	11.08	14.48
	130	2437.0	11.81	11.07	14.47
IEEE 802.11n 2.4GHz 40MHz	27	2422.0	12.12	12.11	15.13
		2437.0	13.05	12.55	15.82
		2452.0	13.15	12.54	15.87
	60	2437.0	13.03	12.53	15.80
	90	2437.0	13.00	12.52	15.78
	120	2437.0	12.98	12.50	15.76
	180	2437.0	12.95	12.48	15.73
	240	2437.0	12.93	12.45	15.71
	270	2437.0	12.90	12.43	15.68
	150	2437.0	12.88	12.40	15.66

Note: The relevant measured result has the offset with cable loss already.

4. Test Results

Antenna	Band	Data Rate (Mbps)	Frequency (MHz)	Limit (mw)	Distance [R] (cm)	Max tune-up Power (upper limit) [P] (dBm)	ANT Gain (dBi)	Numeric Gain [G]	Duty Cycle	[P] x [G] with Duty cycle [TP] (mW)	Power Density [S] (mw/cm ²)
WLAN Antennat-0	IEEE 802.11b	1	2412	1	20	11.80	1.50	1.41	1	21.34	0.004
			2437	1	20	9.20	1.50	1.41	1	11.73	0.002
			2462	1	20	9.00	1.50	1.41	1	11.2	0.002
	IEEE 802.11g	6	2412	1	20	10.90	1.50	1.41	1	17.35	0.003
			2437	1	20	12.10	1.50	1.41	1	22.87	0.005
			2462	1	20	13.60	1.50	1.41	1	32.3	0.006
WLAN Antenna_MIMO	IEEE 802.11n 2.4GHz 20MHz	13	2412	1	20	15.50	4.51	2.82	1	100.06	0.020
			2437	1	20	14.70	4.51	2.82	1	83.22	0.017
			2462	1	20	15.80	4.51	2.82	1	107.21	0.021
	IEEE 802.11n 2.4GHz 40MHz	27	2422	1	20	15.20	4.51	2.82	1	93.38	0.019
			2437	1	20	15.90	4.51	2.82	1	109.71	0.022
			2452	1	20	16.00	4.51	2.82	1	112.27	0.022

Note:

1. Mobile or fixed location transmitters, minimum separation distance is 20cm, even if calculations indicate MPE distance is less.
2. The Numeric Gain calculated by $10^{(\text{ant. Gain(dBi)} / 10)}$.
3. Each band max power which perform MPE of any configurations.
4. The MPE results are evaluated by lowest data rate for WLAN.
5. The device operating IEEE 802.11 b/g mode is 1TX (Diversity).
6. The device operating IEEE 802.11 n mode is 2TX MIMO.