



# **RF EXPOSURE REPORT**

Applicant	International Toy, Inc.			
Address	17922 Fitch STE 100, Irvine CA 92614, USA			
[	I			
Manufacturer or Supplier	Kin Yat (Guangdong) AI Co., Ltd.			
Address	Huang Hua Yuan Industrial Distric China	t, Shi Xing Country, Shao Guan City, Guang Dong,		
Product	AN22 SITH HOLOCRON			
Brand Name	Disney			
Model	400958968047			
Additional Model & Model Difference	N/A			
Date of tests	Oct. 16, 2023 ~ Oct. 30, 2023			
<ul> <li>☑ FCC Part 2 (Sect</li> <li>☑ KDB 447498 D04</li> </ul>	ion 2.1093) I Interim General RF Exposure G	uidance v01		
CONCLUSION: The	submitted sample was found to <u>(</u>	COMPLY with the test requirement		
Teste Project Eng	ed by Lucas Chen ineer / EMC Department	Approved by Glyn He Assistant Manager / EMC Department		
This report is governed by, and incorporates by reference, the Conditions of Testing as posted at the date of issuance of this report at <a href="http://www.bureauverlas.com/home/aboul-us/our_business/cps/aboul-us/terms-conditions/">http://www.bureauverlas.com/home/aboul-us/our_business/cps/aboul-us/terms-conditions/</a> and is intended for your exclusive use. Any copying or replication of this report to or for any other person or entity, or use of our name or trademark, is permitted only with our prior written permission. This report sets forth our indings solely with respect to the test samples identified herein. The results set forth in this report are not indicative or representative of the estilts thereof based upon the information that you provided to us. Measurement uncertainty into account, unless otherwise requested in writing. You have 60 days from date of issuance of this report to notify us of any material error or omission caused by our negligence or if you require measurement uncertainty; provided, however, that such notice shall be peritoally address the issue you wish to raise. <i>A</i> failure to raise such issue within the prescribed time shall constitute your unqualified acceptance of the completeness of this report, the tests conducted and the correctness of the report contents.				

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# TABLE OF CONTENTS

REI	EASE CONTROL RECORD	3
1.	CERTIFICATION	4
2.	RF EXPOSURE DEFINE	5
3.	MULTIPLE RF SOURCES ARE EXEMPT	6
4.	SAR TEST EXCLUSION THRESHOLDS	7



## **RELEASE CONTROL RECORD**

ISSUE NO.	REASON FOR CHANGE	DATE ISSUED
FM2310WDG0044	Original release	Dec. 05, 2023

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## 1. CERTIFICATION

FCC ID:	2ACU8INT120
PRODUCT:	AN22 SITH HOLOCRON
BRAND NAME:	Disney
MODEL NO.:	400958968047
ADDITIONAL NO.:	N/A
TEST SAMPLE:	Engineering Sample
APPLICANT:	International Toy, Inc.
STANDARDS:	FCC Part 2 (Section 2.1093)
	KDB 447498 D04 Interim General RF Exposure Guidance v01



### 2. RF EXPOSURE DEFINE

<u>"Blanket" Exemption – §1.1307(b)(3)(i)(A)</u>

> Regardless of the separation distance, the maximum time-averaged power is no more than 1mw.

<u>"MPE" Exemption – §1.1307(b)(3)(i)(C)</u>

- The minimum separation distance (R in meters) from the body of a nearby person for the frequency (f in MHz) at which the source operates, the ERP (watts) is no more than the calculated value prescribed for that frequency. The MPE-based test exemption condition is in terms of ERP, defined as the product of the maximum antenna gain and the delivered maximum time-averaged power.
- Table applies to any RF source (i.e. single fixed, mobile, and portable transmitters) and specifies power and distance criteria for each of the five frequency ranges used for the MPE limits.

DE Source frequency (MHz)	Minimum Distance		Threshold EDD (watta)	
RF Source frequency (MHZ)	λ <sub>L</sub> / 2π	λ <sub>H</sub> / 2π		
0.3-1.34	159 m–35.6 m		1,920 R².	
1.34-30	35.6 m–1.6 m		3,450 R²/f².	
30-300	1.6 m–159 mm		3.83 R <sup>2</sup> .	
300-1,500	1,500 159 mm–31.8 mm		0.0128 R <sup>2</sup> f.	
1,500-100,000	31.8 mm–0.5 mm		19.2 R <sup>2.</sup>	
R must be at least $\lambda/2\pi$ , where $\lambda$ is the free-space operating wavelength in meters.				

For mobile devices that are not exempt per Table 1 of §1.1307(b)(1)(i)(C) and device at distances from 20 cm to 40 cm and in 0.3 GHz to 6 GHz. The MPE-based test exemption condition is in terms of ERP, defined as the product of the maximum antenna gain and the delivered maximum time-averaged power.

$$P_{\text{th}} (\text{mW}) = ERP_{20 \text{ cm}} (\text{mW}) = \begin{cases} 2040f & 0.3 \text{ GHz} \le f < 1.5 \text{ GHz} \\ \\ 3060 & 1.5 \text{ GHz} \le f \le 6 \text{ GHz} \end{cases}$$

"SAR" Exemption - §1.1307(b)(3)(i)(B)

➢ the available maximum time-averaged power or effective radiated power (ERP), whichever is greater, is less than or equal to the threshold  $P_{th}$  (mW) described in the following formula. This method shall only be used at separation distances (cm) from 0.5 centimeters to 40 centimeters and at frequencies from 0.3 GHz to 6 GHz (inclusive).  $P_{th}$  is given by:

$$P_{\rm th} \,({\rm mW}) = \begin{cases} ERP_{20\,{\rm cm}} (d/20\,{\rm cm})^x & d \le 20\,{\rm cm} \\ \\ ERP_{20\,{\rm cm}} & 20\,{\rm cm} < d \le 40\,{\rm cm} \end{cases}$$

where

$$x = -\log_{10}\left(\frac{60}{ERP_{20}\,\mathrm{cm}\sqrt{f}}\right)$$

And

$$ERP_{20 \text{ cm}} \text{ (mW)} = \begin{cases} 2040f & 0.3 \text{ GHz} \le f < 1.5 \text{ GHz} \\ \\ 3060 & 1.5 \text{ GHz} \le f \le 6 \text{ GHz} \end{cases}$$

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### 3. MULTIPLE RF SOURCES ARE EXEMPT

#### Multiple RF sources are exempt- §1.1307(b)(3)(ii)

(a) The available maximum time-averaged power of each source is no more than 1 mW and there is a separation distance of two centimeters between any portion of a radiating structure operating and the nearest portion of any other radiating structure in the same device, except if the sum of multiple sources is less than 1 mW during the time-averaging period, in which case they may be treated as a single source (separation is not required).

(b) Either SAR-based or MPE-based exemption may be considered for test exemption for fixed, mobile, or portable device exposure conditions; therefore, the contributions from each exemption in conjunction with the measured SAR (Evaluatedk term) should be used to determine exemption for simultaneous transmission according to Formula below,

$$\sum_{i=1}^{a} \frac{P_i}{P_{th,i}} + \sum_{j=1}^{b} \frac{ERP_j}{ERP_{th,j}} + \sum_{k=1}^{c} \frac{Evaluated_k}{Exposure\ Limit_k} \leq 1$$

The sum of the ratios of the applicable terms for SAR-based, MPE-based and measured SAR or MPE should be less than 1, to determine simultaneous transmission exposure compliance.

Where:

*P<sub>i</sub>* = the available maximum time-averaged power or the ERP, whichever is greater, for fixed, mobile, or portable RF source *i* at a distance between 0.5 cm and 40 cm (inclusive).

 $P_{th,i}$  = the exemption threshold power ( $P_{th}$ ) according to <u>paragraph (b)(3)(i)(B)</u> of this section for fixed, mobile, or portable RF source *i*.  $ERP_i$  = the ERP of fixed, mobile, or portable RF source *j*.

 $ERP_{in,j}$  = exemption threshold ERP for fixed, mobile, or portable RF source *j*, at a distance of at least  $\lambda/2\pi$  according to the applicable formula of paragraph (b)(3)(i)(C) of this section.

*Evaluated*<sub>k</sub> = the maximum reported SAR or MPE of fixed, mobile, or portable RF source k either in the device or at the transmitter site from an existing evaluation at the location of exposure.

*Exposure Limit*<sub>k</sub> = either the general population/uncontrolled maximum permissible exposure (MPE) or specific absorption rate (SAR) limit for each fixed, mobile, or portable RF source k, as applicable from  $\S 1.1310$  of this chapter.

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a = number of fixed, mobile, or portable RF sources claiming exemption using paragraph (b)(3)(i)(B) of this section for P<sub>th</sub>, including existing exempt transmitters and those being added.

b = number of fixed, mobile, or portable RF sources claiming exemption using paragraph (b)(3)(i)(C) of this section for Threshold ERP, including existing exempt transmitters and those being added.

c = number of existing fixed, mobile, or portable RF sources with known evaluation for the specified minimum distance including existing evaluated transmitters.



## 4. SAR TEST EXCLUSION THRESHOLDS

When the measurement distance is specified at 3 m, the relationship between EIRP and field strength can be expressed by the following formula:

 $EIRP(dBm) = E(dB \mu V/m)-95.3$ 

Mode	Frequency (KHz)	Fundamental Emission E (dB µ V/m)	EIRP (dBm)
122.815KHz (RFID)	122.815	65.44	-29.79

The tuned EIRP (declared by client)

Mode	Frequency (KHz)	Target Power (dBm)	Tolerance (dBm)	Lower Tolerance (dBm)	Upper Tolerance (dBm)
122.815KHz (RFID)	122.815	-30	+-1	-31	-29

MPE-based Exemption §1.1307(b)(3)(i)(A)					
Operation Mode         Frequency Band (KHz)         Max. EIRP (dBm)         Max. EIRP (mW)         Limit Threshold (mW)					
122.815KHz (RFID)	111-150	-29	0.00126	1	Pass

#### Conclusion

Therefore this device complies with FCC's RF radiation exposure limits for general population without SAR evaluation.

--- END ---

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