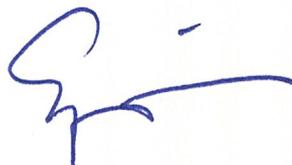


Test Requested	Conclusion
1. Laser Power Measurement according to EN 60825-1: 1994 + A2: 2001 + A1: 2002. (Refer to Annex E of EN 62115: 2005 + A12: 2015)	PASS*

Remark: The selected parts of item listed were found to comply with the requirements of Class 1 by tests on the submitted samples by the applicant and inspection of technical details submitted by the applicant.

* Per client's requirement, only the selected LED(s) in the submitted sample were tested, the detail of tested LED(s) is listed in the result page(s).

Signed for and on behalf of
 SGS-CSTC Standard Technical Services Co., Ltd.
 Shenzhen Branch-Toy laboratory




Xiao Yongbo, Spring
 Supervisor



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Test Report

No.: T51810290130EL

Date: NOV 30, 2018

Page 3 of 14

EN 60825-1 SPECIFICATION REQUIREMENTS & TEST RESULTS

<u>Clause</u>	<u>Assessment</u>	<u>Remarks</u>
1. Scope and object	--	
2. Normative references	--	
3. Definitions	--	
4. Engineering specifications	--	*
5. Labelling	N/A	
6. Other information requirements	N/A	
7. Additional requirements for specific laser products	N/A	
8. Classification	--	
9. Measurement for classification	Pass	
10. Safety precautions	--	
11. Hazards incidental to laser operation	--	
12. Procedures for hazard control	--	
13. Maximum permissible exposures	--	

*** Note:**

The requirements of the relevant product safety standard shall be fulfilled during operation and in the event of a single fault for the following:

- electrical hazards;
- excessive temperature;
- spread of fire from the equipment;
- sound and ultrasonics;
- harmful substances;
- explosion.

If no provisions are included in the product safety standard, the relevant subclauses of IEC 61010-1 shall apply.



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DETAILS OF TEST RESULTS

Part under test	Wavelength		Emission Duration	Measured Accessible Emission Level (MAEL)	Limit	MAEL / Limit	Comment
Red LED	a)	632.0 nm	100 sec.	N/A	N/A	N/A	N/A
	b)	632.0 nm	100 sec.	3.0 μ W	390.0 μ W	<1	Pass
Green LED	a)	517.0 nm	100 sec.	1.2 mJ	85.3 mJ	<1	Pass
	b)	517.0 nm	100 sec.	12.0 μ W	390.0 μ W	<1	Pass
Blue LED	a)	466.0 nm	100 sec.	1.7 mJ	8.1 mJ	<1	Pass
	b)	466.0 nm	100 sec.	17.0 μ W	390.0 μ W	<1	Pass
Yellow LED	a)	593.0 nm	100 sec.	0.1 mJ	2825.3 mJ	<1	Pass
	b)	593.0 nm	100 sec.	1.0 μ W	390.0 μ W	<1	Pass

Remark: a) For Retinal Photochemical Hazard
 b) For Retinal Thermal Hazard
 N/A = Not Applicable



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Sample Picture (As received)
 Attention! Only selected LED(s) was (were) tested, Detail(s)
 is (are) listed in the specimen description in result page(s).

Pic.1



Pic.2



Pic.3



Pic.4

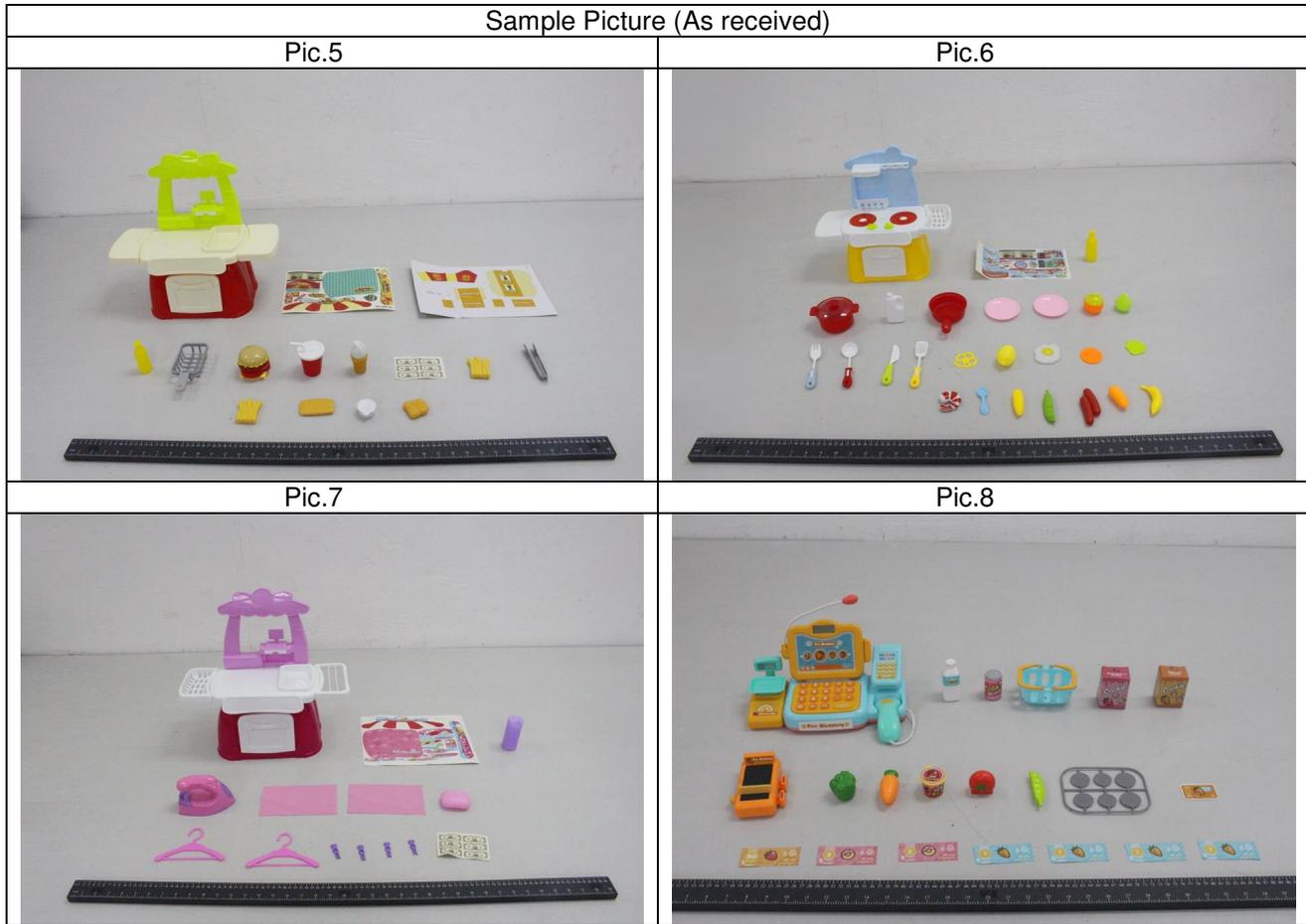


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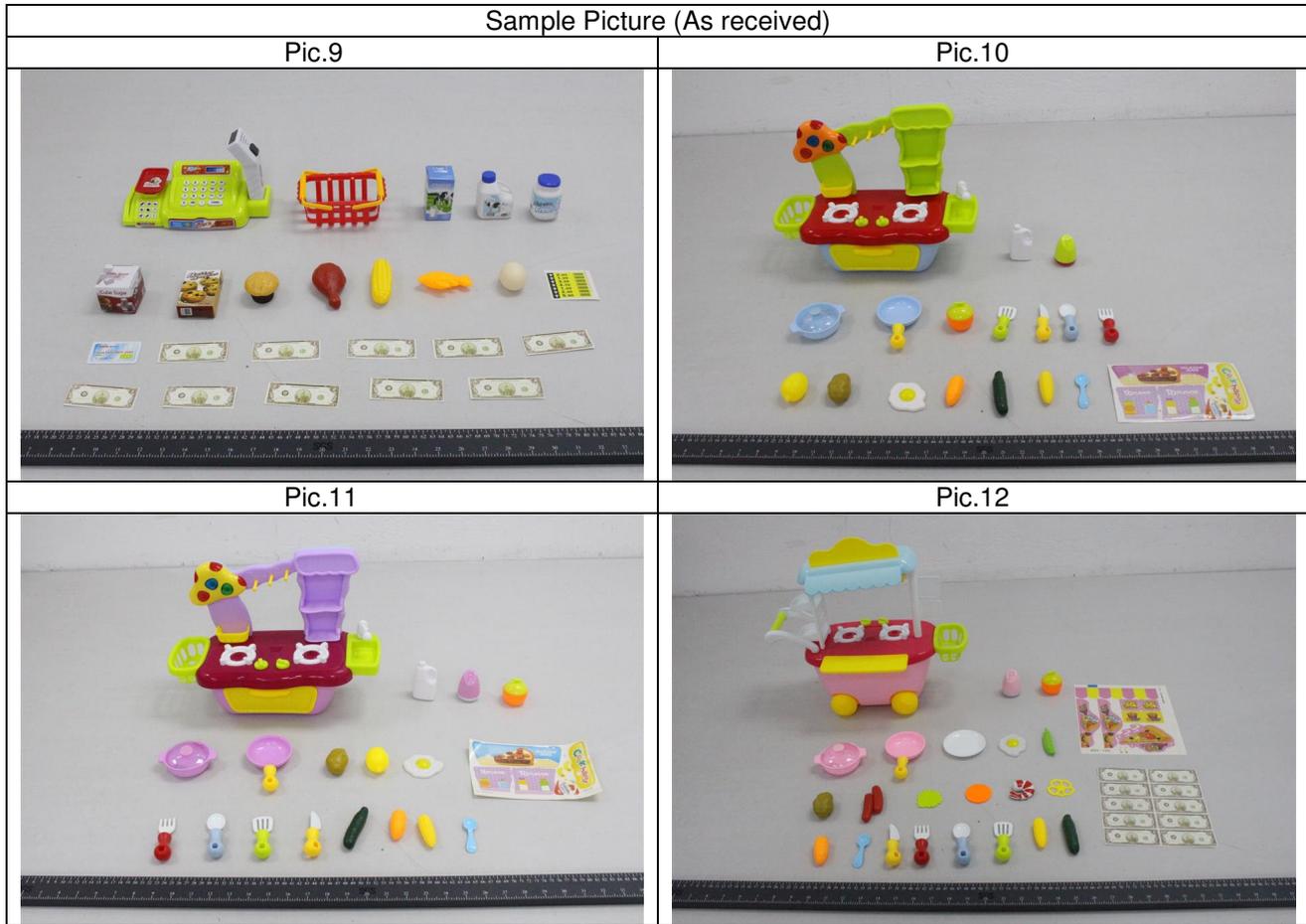


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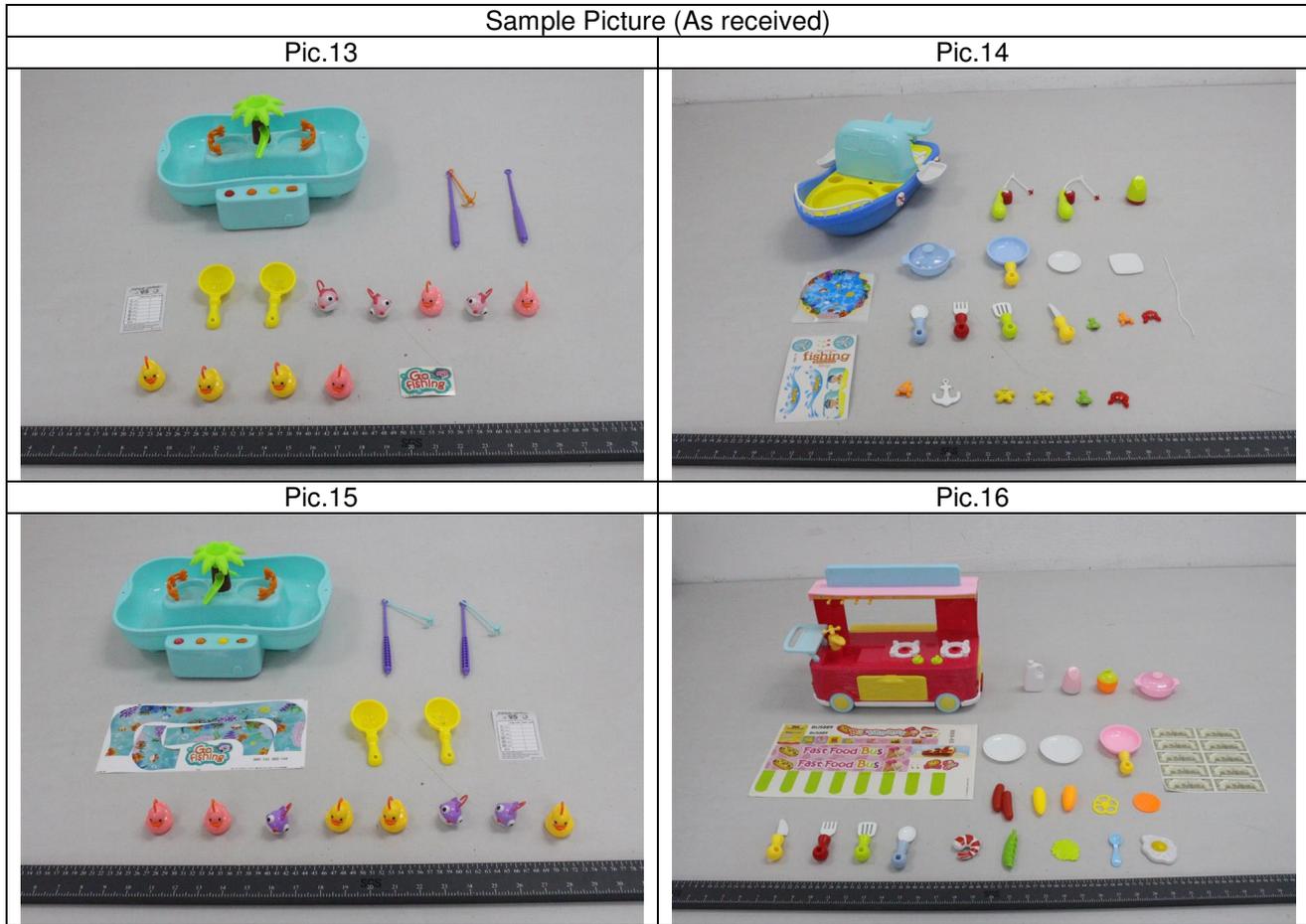


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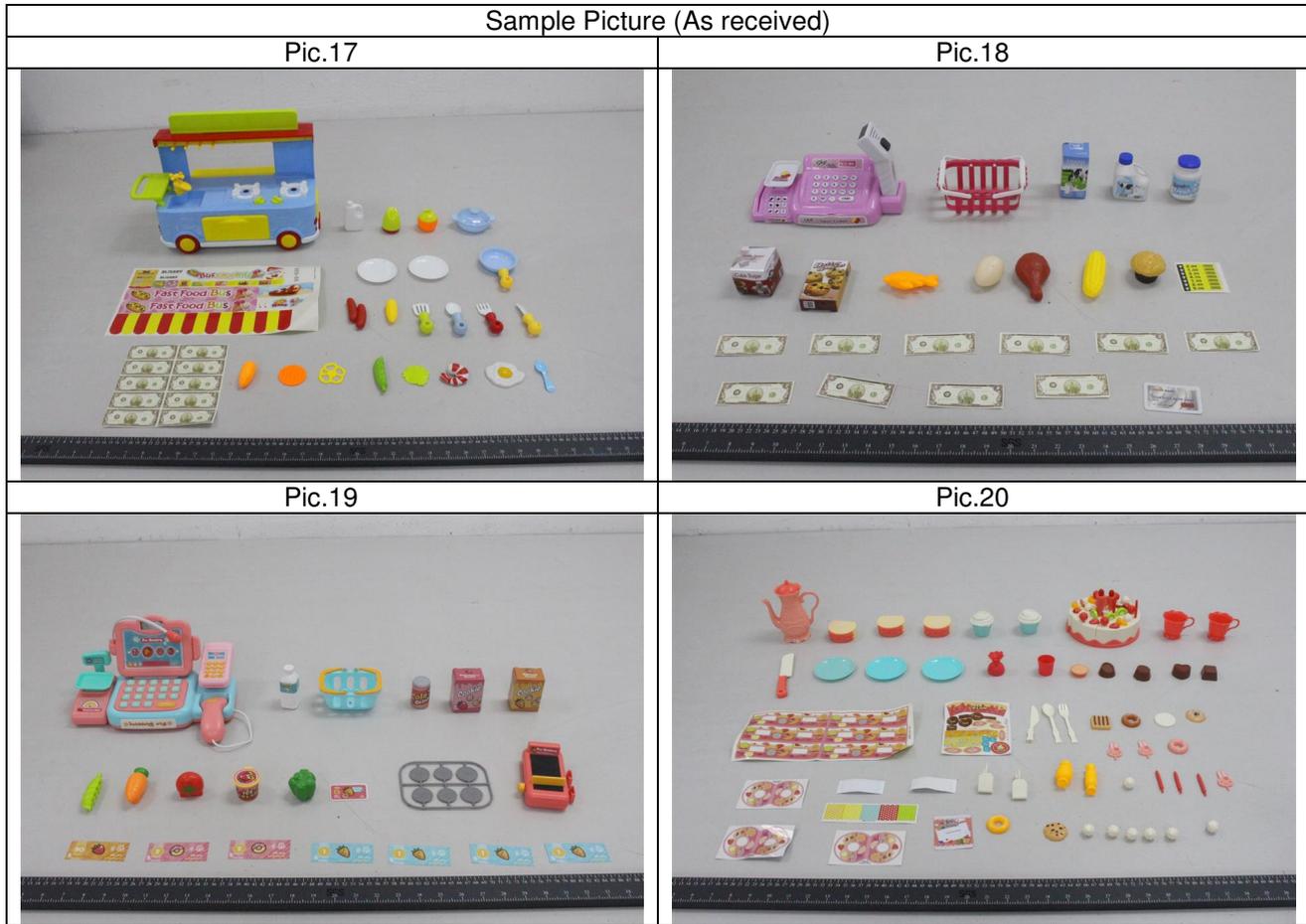
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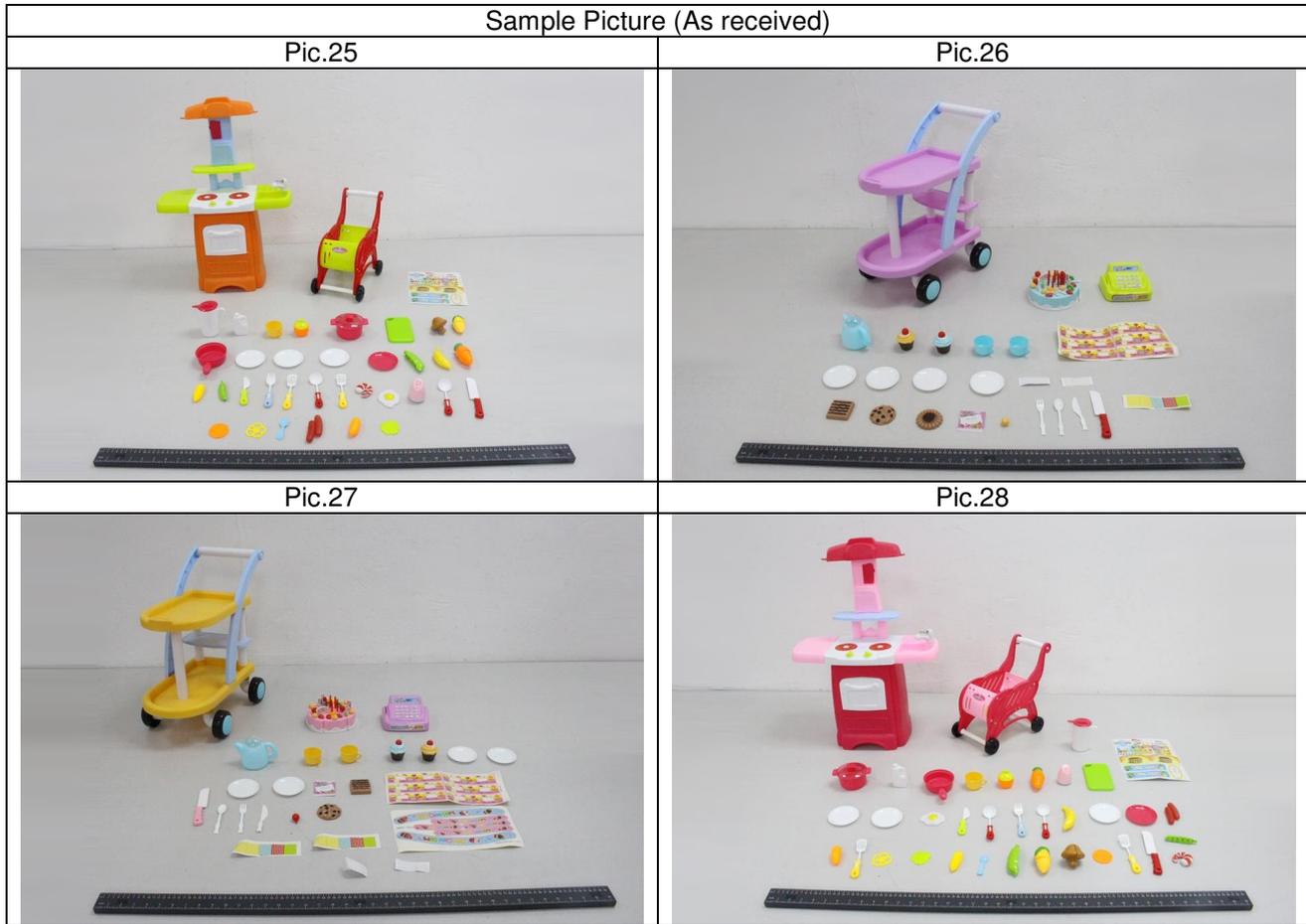


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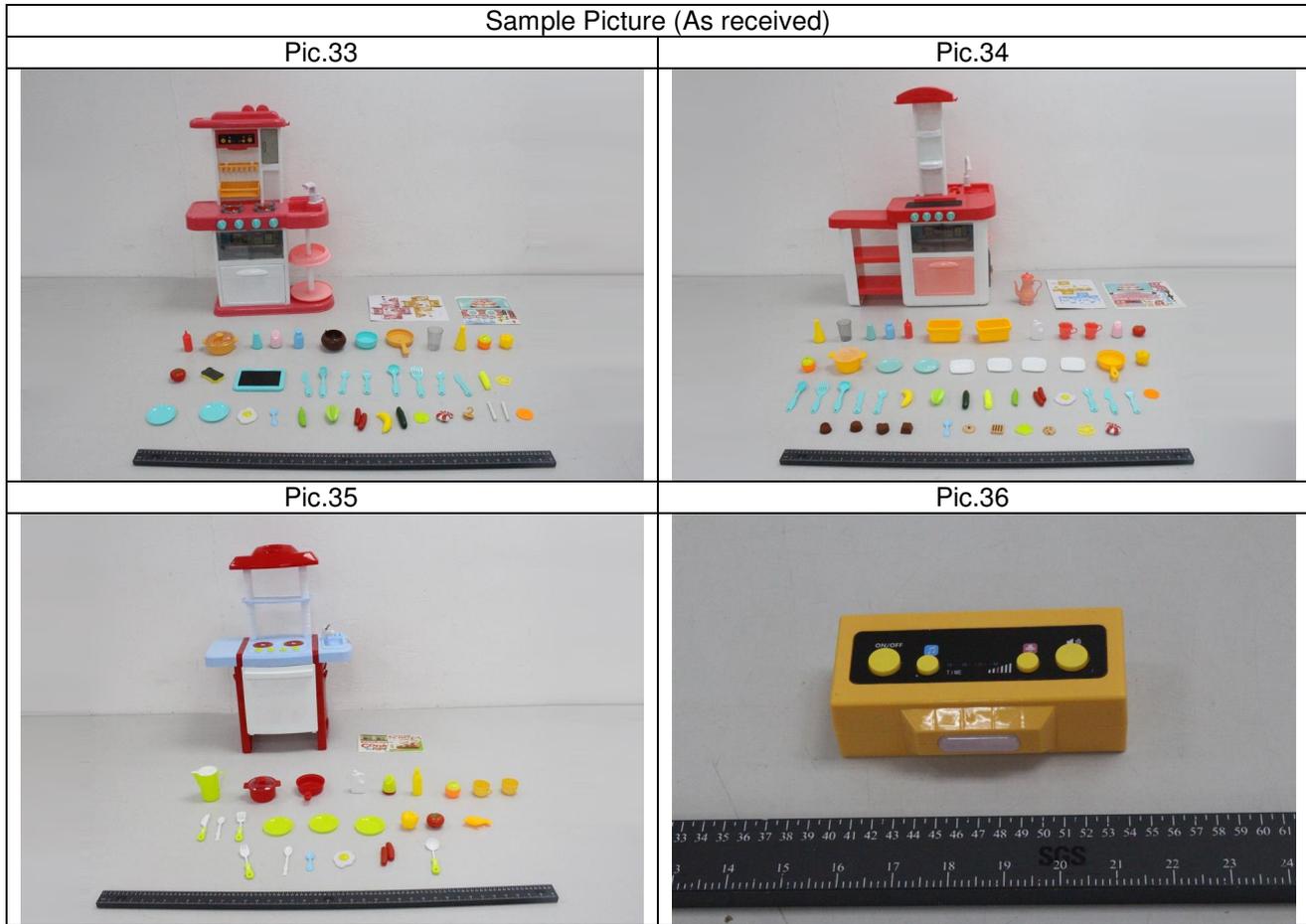
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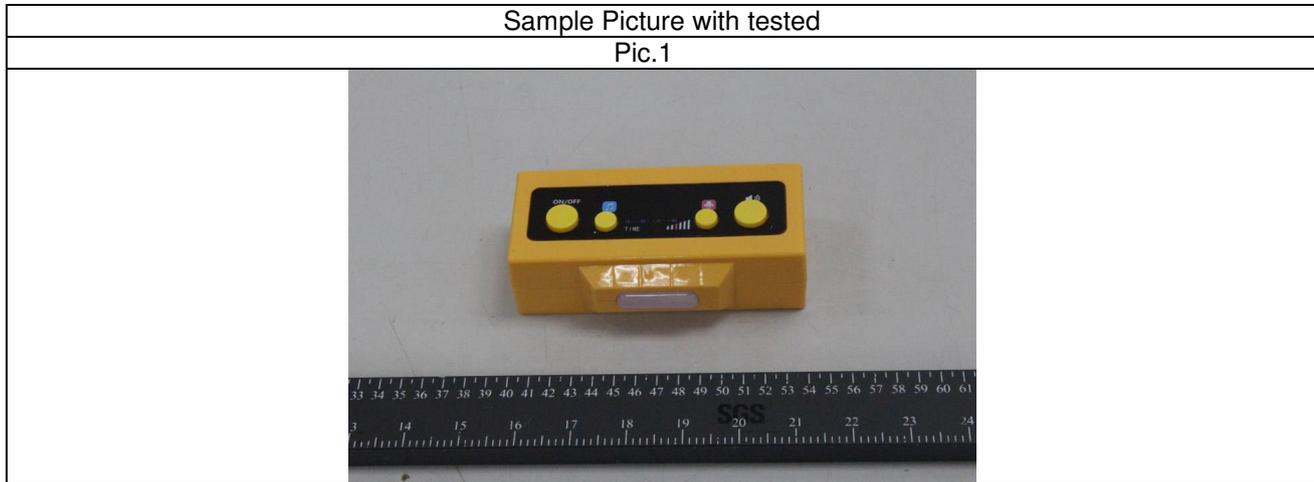
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