

# RF EXPOSURE REPORT

|           |                                                                           |
|-----------|---------------------------------------------------------------------------|
| Applicant | BRANCH OF LONG THUY - LT COMPANY LIMITED                                  |
| Address   | Hamlet 2, Tan Trach Commune, Can Duoc District, Long An, Long An, Vietnam |

|                                     |                                                                                                                                                              |
|-------------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Manufacturer or Supplier            | BRANCH OF LONG THUY - LT COMPANY LIMITED                                                                                                                     |
| Address                             | Hamlet 2, Tan Trach Commune, Can Duoc District, Long An, Long An, Vietnam                                                                                    |
| Product                             | Toy RC Monster Spinning Car                                                                                                                                  |
| Brand Name                          | Sharper Image                                                                                                                                                |
| Model                               | 1012639                                                                                                                                                      |
| Additional Model & Model Difference | 1014391, 1018808, 1014812, 1015605, 1018492, 1019636, 1018965, 101XXXX (where XXXX can be digits 0000-9999 which represent different customers), see items 1 |
| Date of tests                       | Mar. 03, 2025 ~ Mar. 06, 2025                                                                                                                                |

☒ FCC Part 2 (Section 2.1093)

☒ KDB 447498 D01 V06

☒ IEEE C95.1

**CONCLUSION: The submitted sample was found to COMPLY with the test requirement**

|                                                                                     |                                                                                                             |
|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------------------------------|
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|  | <br>Date: Mar. 28, 2025 |

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Test Report No.: FM2502WDG0200

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Test Report No.: FM2502WDG0200

## RELEASE CONTROL RECORD

| ISSUE NO.     | REASON FOR CHANGE | DATE ISSUED   |
|---------------|-------------------|---------------|
| FM2502WDG0200 | Original release  | Mar. 28, 2025 |

## 1. CERTIFICATION

|                        |                                                                                                                                                       |
|------------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------|
| <b>FCC ID:</b>         | 2BMHW2025A27A                                                                                                                                         |
| <b>PRODUCT:</b>        | Toy RC Monster Spinning Car                                                                                                                           |
| <b>MODEL NO.:</b>      | 1012639                                                                                                                                               |
| <b>ADDITIONAL NO.:</b> | 1014391, 1018808, 1014812, 1015605, 1018492,<br>1019636, 1018965, 101XXXX (where XXXX can be<br>digits 0000-9999 which represent different customers) |
| <b>STANDARDS:</b>      | FCC Part 2 (Section 2.1093)                                                                                                                           |
|                        | KDB 447498 D01 V06                                                                                                                                    |
|                        | IEEE C95.1                                                                                                                                            |

Additional models (see above table) are identical with the test model 1012639 except the color of the appearance and model number for trading purpose.

## 2. RF EXPOSURE DEFINE

The corresponding SAR Exclusion Threshold condition, listed below:

- 1) The 1-g and 10-g SAR test exclusion thresholds for 100 MHz to 6 GHz at test separation distances  $\leq 50$  mm are determined by:

$[(\text{max. power of channel, including tune-up tolerance, mW})/(\text{min. test separation distance, mm})] \cdot [\sqrt{f(\text{GHz})}] \leq 3.0$  for 1-g SAR and  $\leq 7.5$  for 10-g extremity SAR, 16 where

- $f(\text{GHz})$  is the RF channel transmit frequency in GHz
- Power and distance are rounded to the nearest mW and mm before calculation
- The result is rounded to one decimal place for comparison

The test exclusions are applicable only when the minimum test separation distance is  $\leq 50$  mm and for transmission frequencies between 100 MHz and 6 GHz. When the minimum test separation distance is  $< 5$  mm, a distance of 5 mm is applied to determine SAR test exclusion.

- 2) At 100 MHz to 6 GHz and for test separation distances  $> 50$  mm, the SAR test exclusion threshold is determined according to the following:
- a) [Threshold at 50 mm in step 1) + (test separation distance - 50 mm)  $\cdot$  (f(MHz)/150)] mW, at 100MHz to 1500 MHz
  - b) [Threshold at 50 mm in step 1) + (test separation distance - 50 mm)  $\cdot$  10] mW at  $> 1500$  MHz and  $\leq 6$  GHz
- 3) At frequencies below 100 MHz, the following may be considered for SAR test exclusion.
- a) The threshold at the corresponding test separation distance at 100 MHz in step 2) is multiplied by  $[1 + \log(100/f(\text{MHz}))]$  for test separation distances  $> 50$  mm and  $< 200$  mm.
  - b) The threshold determined by the equation in a) for 50 mm and 100 MHz is multiplied by  $\frac{1}{2}$  for test separation distances  $\leq 50$  mm.
  - c) SAR measurement procedures are not established below 100 MHz. When SAR test exclusion cannot be applied, a KDB inquiry is required to determine SAR evaluation requirements for any test results to be acceptable.

## 3. CLASSIFICATION

The antenna of this product, under normal use condition, is at less than 20cm away from the body of the user. So, this device is classified as **Portable Device**.

## 4. SAR TEST EXCLUSION THRESHOLDS

The tuned conducted Average Power (declared by client)

| Mode | Frequency (MHz) | Target Power (dBm) | Tolerance (dBm) | Lower Tolerance (dBm) | Upper Tolerance (dBm) |
|------|-----------------|--------------------|-----------------|-----------------------|-----------------------|
| TX   | 27.14           | -47                | ± 2             | -49                   | -45                   |

The measured conducted Average Power

| Mode | Frequency (MHz) | Averaged Power (dBuV/m) | Averaged Power (dBm) |
|------|-----------------|-------------------------|----------------------|
| TX   | 27.14           | 48.03                   | -47.21               |

Note:

$$E = \frac{\sqrt{30 PG}}{d}$$

E = Electric field strength in V/m

$$V/m = 10^{(dBuV/m - 120)/20}$$

P = Power in Watts

G = Antenna gain in dBi

d = Measurement distance in metres

Power ≈ 0.000019 (mW)

$$dBm = 10 \cdot \log_{10}(0.000019) \approx -47.21 (dBm)$$

### SAR Test Exclusion Thresholds

| Frequency (MHz) | Maximum source-based time averaged conducted output power (dBm) | Minimum separation distance (mm) | Result of Eq. 1 | Limit for 1-g SAR | Limit for 10-g extremity SAR | Verdict         |
|-----------------|-----------------------------------------------------------------|----------------------------------|-----------------|-------------------|------------------------------|-----------------|
| 27.14           | -45                                                             | 5                                | 0.000001        | 3.0               | 7.5                          | Exempt from SAR |

### Conclusion

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