



RF EXPOSURE EVALUATION REPORT

FCC ID : UZ7RS5100
Equipment : Bar Code Scanner
Brand Name : Zebra
Model Name : RS5100
Applicant : Zebra Technologies Corporation
1 Zebra Plaza, Holtsville, NY 11742
Manufacturer : Zebra Technologies Corporation
1 Zebra Plaza, Holtsville, NY 11742
Standard : 47 CFR Part 2.1093
FCC KDB 447498 D01 v06

We, SPORTON INTERNATIONAL INC has been evaluated this product in accordance with 47 CFR Part 2.1093 and it complies with applicable limit.

The report must not be used by the client to claim product certification, approval, or endorsement by TAF or any agency of government.

The results in this report apply exclusively to the tested model / sample. Without written approval of SPORTON INTERNATIONAL INC. EMC & Wireless Communications Laboratory, the test report shall not be reproduced except in full.

Approved by: Cona Huang / Deputy Manager

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1. General Information

1.1 Description of Device Under Test (DUT)

| Product Feature & Specification | |
|---|---|
| DUT Type | Bar Code Scanner |
| Brand Name | Zebra |
| Model Name | RS5100 |
| FCC ID | UZ7RS5100 |
| Wireless Technology and Frequency Range | Bluetooth: 2402 MHz ~ 2480 MHz NFC : 13.56 MHz |
| Mode | Bluetooth BR/EDR/LE NFC:ASK |
| SW Version | N/A |
| FW Version | R00 |
| MFD | 27SEP19 |
| EUT Stage | Identical Prototype |

Remark: The above DUT'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: Wan Liu

2. Maximum RF output power among production units

| Band / Mode | Average Power (dBm) | | | |
|-------------|---------------------|-----|-----|------|
| | BR / EDR | | | LE |
| | 1M | 2M | 3M | GFSK |
| Bluetooth | 7.5 | 7.5 | 7.5 | 7.5 |



3. RF Exposure Evaluation

| Bluetooth Max Power (dBm) | mW | Separation Distance (mm) | Frequency (GHz) | Exclusion Thresholds |
|------------------------------|------|-----------------------------|--------------------|-------------------------|
| 7.5 | 5.62 | 5 | 2.48 | 1.77 |

Note:

- Per KDB 447498 D01v06 the 1-g and 10-g SAR test exclusion thresholds for 100 MHz to 6 GHz at *test separation distances* ≤ 50 mm are determined by:

$$[(\text{max. power of channel, including tune-up tolerance, mW}) / (\text{min. test separation distance, mm})] \cdot [\sqrt{f(\text{GHz})}] \leq 3.0 \text{ for}$$

1-g SAR and ≤ 7.5 for 10-g extremity SAR

- f(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

Conclusion: Per KDB 447498 D01v06, when the minimum test separation distance is < 5 mm, a distance of 5 mm is applied to determine SAR test exclusion. The test exclusion threshold is 1.77 which is ≤ 7.5, SAR testing is not required.