

Report No.: FA971801



### 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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# History of this test report

Report No.	Version	Description	Issued Date
FA971801	Rev. 01	Initial issue of report	Oct. 28, 2019

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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	Bluetooth: 2402 MHz ~ 2480 MHz				
Frequency Range	NFC : 13.56 MHz				
Mode	Bluetooth BR/EDR/LE				
	NFC:ASK				
SW Version	N/A				
FW Version	R00				
MFD	27SEP19				
EUT Stage	Identical Prototype				

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**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: <u>Jason Wang</u> Report Producer: <u>Wan Liu</u>

### 2. Maximum RF output power among production units

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

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#### 3. RF Exposure Evaluation

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

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#### 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:

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

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