# **RF Exposure Evaluation Report**

APPLICANT : Zebra Technologies Corporation

**EQUIPMENT**: Hands Free Imager

**BRAND NAME**: Zebra

MODEL NAME : RS507X

FCC ID : UZ7RS507X

STANDARD : 47 CFR Part 2.1093

FCC KDB 447498 D01 v06

We, SPORTON INTERNATIONAL INC., would like to declare that the device has been evaluated in accordance with 47 CFR Part 2.1093, and pass the limit. Without written approval of SPORTON INTERNATIONAL INC., the test report shall not be reproduced except in full.

Reviewed by: Eric Huang / Manager

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Approved by: Jones Tsai / Manager



**Report No.: FA752206** 

#### SPORTON INTERNATIONAL INC.

No.52, Hwa Ya 1st Rd., Hwa Ya Technology Park, Kwei-Shan District, Taoyuan City, Taiwan (R.O.C.)

TEL: 886-3-327-3456 FAX: 886-3-328-4978 FCC ID: UZ7RS507X Page Number : 1 of 5
Report Issued Date : Nov. 17, 2017

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## **Revision History**

REPORT NO.	VERSION	DESCRIPTION	ISSUED DATE
FA752206 Rev. 01		Initial issue of report	Nov. 17, 2017

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## 1. Administration Data

Testing Laboratory	esting Laboratory		
Test Site	SPORTON INTERNATIONAL INC.		
Test Site Location	No.52, Hwa Ya 1st Rd., Hwa Ya Technology Park, Kwei-Shan District, Taoyuan City, Taiwan (R.O.C.) TEL: +886-3-327-3456 FAX: +886-3-328-4978		

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	Applicant		
Company Name	Zebra Technologies Corporation		
Address	1 Zebra Plaza, Holtsville, NY 11742		

Manufacturer		
Company Name	Zebra Technologies Corporation	
Address	1 Zebra Plaza, Holtsville, NY 11742	

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## 2. General Information

#### 2.1 Description of Device Under Test (DUT)

Product Feature & Specification			
DUT Type	Hands Free Imager		
Brand Name	Zebra		
Model Name RS507X			
FCC ID	UZ7RS507X		
Wireless Technology and Frequency Range	Bluetooth: 2402 MHz ~ 2480 MHz		
Mode	Bluetooth BR/EDR		
HW Version	EV1B		
SW Version	S00-006-N11		
MFD	24OCT17		
DUT 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.

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

Mode / Band	Maximum Average Power (dBm)		
	1Mbps	2Mbps	3Mbps
	(GFSK)	π/4-DQPSK	(8-DPSK)
2.4GHz Bluetooth	3.5	0.5	0.5

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#### 4. RF Exposure Evaluation

Bluetooth	mW	Separation	Frequency	Exclusion
Max Power (dBm)		Distance (mm)	(GHz)	Thresholds
3.5	2.24	5	2.48	0.71

#### 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

- $\cdot$  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 0.71 which is <= 7.5, SAR testing is not required.

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