# **RF Exposure Evaluation Report**

APPLICANT : Zebra Technologies Corporation

**EQUIPMENT**: Digital Scanner

BRAND NAME : Zebra

MODEL NAME : DS3678

FCC ID : UZ7DS3678

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 / Deputy Manager

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Jones/sur

Approved by: Jones Tsai / Manager





Report No.: FA5O0915

#### 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: UZ7DS3678 Page Number : 1 of 4
Report Issued Date : Apr. 28, 2016

Report Version : Rev. 01

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## **Revision History**

REPORT NO.	VERSION	DESCRIPTION	ISSUED DATE
FA5O0915	Rev. 01	Initial issue of report	Apr. 28, 2016

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### 1. Administration Data

Testing 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 11742-1300, USA		

Manufacturer			
Company Name	Zebra Technologies Corporation		
Address	1 Zebra Plaza, Holtsville, NY 11742-1300, USA		

### 2. General Information

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

Product Feature & Specification				
DUT Type	Digital Scanner			
Brand Name	Zebra			
Model Name	DS3678			
FCC ID	UZ7DS3678			
Wireless Technology and Frequency Range	Bluetooth: 2402 MHz ~ 2480 MHz			
Mode	· Bluetooth EDR/LE			
Antenna Type	SMD Antenna			
HW Version	Rev A			
SW Version	Rev A			
MFD SR	19MAR16			
MFD HD	21MAR16			
MFD HP	08MAR16			
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.

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

	Average Power (dBm)			
Mode / Band	EDR			LE
	1Mbps	2Mbps	3Mbps	(GFSK)
Bluetooth	6.5	6.5	6.5	6.5

#### 4. RF Exposure Evaluation

Bluetooth	mW	Separation	Frequency	Exclusion
Max Power (dBm)		Distance (mm)	(GHz)	Thresholds
6.5	4.00	5	2.48	1.26

#### 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 1.26 which is <= 3.0, SAR testing is not required.

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