RF Exposure Evaluation Report

FCC ID	:	**UZ7RS2100**
Equipment	:	**Bar Code Scanner**
Brand Name	:	**Zebra**
Model Name	:	**RS2100**
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**

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

Sporton Lab is accredited to ISO 17025 by Taiwan Accreditation Foundation (TAF code: 1190) and the FCC designation No. TW1190 under the FCC 2.948(e) by Mutual Recognition Agreement (MRA) in FCC evaluation.

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

Cona Huang

Approved by: Cona Huang / Deputy Manager

SPORTON INTERNATIONAL INC. EMC & Wireless Communications Laboratory
No. 52, Huaya 1st Rd., Guishan Dist., Taoyuan City, Taiwan (R.O.C.)

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Revision History

REPORT NO.	VERSION	DESCRIPTION	ISSUED DATE
FA410609	Rev. 01	Initial issue of report	Feb. 08, 2024

1. General Information

1.1 Description of Device Under Test (DUT)

Product Feature & Specification	
DUT Type	Bar Code Scanner
Brand Name	Zebra
Model Name	RS2100
FCC ID	UZ7RS2100
Wireless Technology and Frequency Range	Bluetooth: 2400 MHz ~ 2483.5 MHz
Mode	Bluetooth BR/EDR/LE
Antenna Type	Chip Antenna
HW Version	EV
FW Version	N07
MFD	19DEC23
DUT Stage	Identical Prototype

2. Maximum RF output power among production units

Band / Mode	Average Power (dBm)				
	BR / EDR			BLE	LE
	1M	2M	3M	0-2M	GFSK
Bluetooth	4.5	6	6	0.5	2.5

3. RF Exposure Evaluation

Bluetooth Max Power (dBm)	mW	Separation Distance (mm)	Frequency (GHz)	Exclusion Thresholds
6	3.98	5	2.48	1.25

Note:

1. 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*)] ·[√f(GHz)] ≤ 3.0 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 1.25 which is <= 3, SAR testing is not required.