

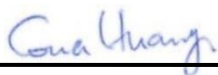
RF Exposure Evaluation Report

FCC ID : UZ7DS8178A
Equipment : Digital Scanner
Brand Name : Zebra
Model Name : DS8178A
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



Approved by: Cona Huang / Deputy Manager



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Revision History

REPORT NO.	VERSION	DESCRIPTION	ISSUED DATE
FA320318-01	Rev. 01	Initial issue of report	Mar. 22, 2023

1. General Information

1.1 Description of Device Under Test (DUT)

Product Feature & Specification	
DUT Type	Digital Scanner
Brand Name	Zebra
Model Name	DS8178A
FCC ID	UZ7DS8178A
Wireless Technology and Frequency Range	Bluetooth: 2402 MHz ~ 2480 MHz
Mode	Bluetooth LE
HW Version	DV
MFD	12DEC22
DUT Stage	Identical Prototype

2. Maximum RF output power among production units

Mode	Average Power (dBm)
	LE
	1Mbps
Bluetooth	4.78

3. RF Exposure Evaluation

Bluetooth Max Power (dBm)	mW	Separation Distance (mm)	Frequency (GHz)	Exclusion Thresholds
4.78	3.01	5	2.48	0.95

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

- $f(\text{GHz})$ 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 0.95 which is ≤ 3 , SAR testing is not required.