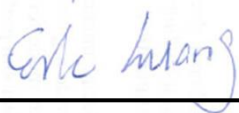


# RF Exposure Evaluation Report

APPLICANT : Zebra Technologies Corporation  
EQUIPMENT : MPACT Tag  
BRAND NAME : Zebra Technologies Corporation  
MODEL NAME : MPACT-OUTR1  
MARKETING NAME : Outdoor Beacon  
FCC ID : UZ7MPACT-OUTR1  
STANDARD : 47 CFR Part 2.1093  
FCC KDB 447498 D01 v05r02

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



Approved by: Jones Tsai / Manager



## SPORTON INTERNATIONAL INC.

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



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## **Revision History**

<b>REPORT NO.</b>	<b>VERSION</b>	<b>DESCRIPTION</b>	<b>ISSUED DATE</b>
FA580424	Rev. 01	Initial issue of report	Oct. 08, 2015



### 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

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

Manufacturer	
Company Name	Wistron NeWeb Corporation
Address	20 Park Avenue II, Hsinchu Science Park, Hsinchu 308, Taiwan, R.O.C.

### 2. General Information

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

Product Feature & Specification	
DUT Type	MPACT Tag
Brand Name	Zebra Technologies Corporation
Model Name	MPACT-OUTR1
Marketing Name	Outdoor Beacon
FCC ID	UZ7MPACT-OUTR1
Wireless Technology and Frequency Range	Bluetooth: 2402 MHz ~ 2480 MHz
Mode	Bluetooth v4.0-LE
Antenna Type	Patch antenna
HW Version	Rev A
SW Version	2.0.0.0-032R
DUT Stage	Production Unit

**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	Average Power (dBm)
	BT4.0-LE (GFSK)
Bluetooth	-7

**4. RF Exposure Evaluation**

Bluetooth Max Power (dBm)	mW	Separation Distance (mm)	Frequency (GHz)	Exclusion Thresholds
-7	0.2	5	2.48	0.06

**Note:**

- Per KDB 447498 D01v05r02, 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:

$[(\text{max. power of channel, including tune-up tolerance, mW}) / (\text{min. test separation distance, mm})] \cdot [\sqrt{f(\text{GHz})}] \leq 3.0$  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 D01v05r02, 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 0.06 which is ≤ 3, SAR testing is not required.