



RF Exposure Report

(Part 0: SAR Char Evaluation)

FCC ID : UZ7TCX010
Equipment : Touch Computer
Brand Name : ZEBRA
Model Name : TCX010
Applicant : Zebra Technologies Corporation
3 Overlook Point, Lincolnshire, IL 60069 USA
Standard : FCC 47 CFR Part 2 (2.1093)

We, SPORTON INTERNATIONAL INC., would like to declare that the tested sample has been evaluated in accordance with the test procedures and has been in compliance with the applicable technical standards.

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

Approved by: Cona Huang / Deputy Manager

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History of this test report

Report No.	Version	Description	Issued Date
FA571515-01A	01	Initial issue of report	Dec 12, 2025

1. Introduction

The RF exposure limit is defined based on time-averaged RF exposure. The product implements Qualcomm Smart Transmit feature which controls the instantaneous transmitting power for WLAN/BT and RFID transmitter to ensure the product in compliance with RF exposure limit over a defined time window. To control and manage transmitting power in real time and to ensure at all times the time-averaged RF exposure is compliant to the regulation requirement.

Smart Transmit allows the device to transmit at higher power instantaneously, as high as Pmax, when needed, but enforces power limiting to maintain time-averaged transmit power to Plimit. Below table shows Plimit EFS settings and maximum tune up output power Pmax configured for this EUT for various transmit conditions (Device State Index DSI).

<Terminologies in this report>

Plimit	The time-averaged RF power which corresponds to SAR_design_target.
Pmax	Maximum target power level
SAR_design_target:	The design target for SAR compliance. It should be less than regulatory power density limit to account for all device design related uncertainties.
SAR char	Plimit for all the technologies/bands for all applicable DSI

<SAR Characterization>

SAR char must be generated to cover all radio configurations and usage scenarios that the wireless device supports for operating at 6 GHz or below. It will then be used as input for Smart Transmit to control and manage RF exposure for f < 6 GHz.

<SAR design target>

Band	Device Uncertainty (dB)	Head	Hotspot	Body worn / Extremity	Extremity	Sensor off
		DSI4	DSI2	DSI3	DSI1	DSI0
WLAN2.4GHz	1.5	0.950	0.950	0.950	2.540	0.950
WLAN5.2GHz	1.5	0.950	0.950	0.950	2.540	0.950
WLAN5.3GHz	1.5	0.950	0.950	0.950	2.540	0.950
WLAN5.5GHz	1.5	0.950	0.950	0.950	2.540	0.950
WLAN5.8GHz	1.5	0.950	0.950	0.950	2.540	0.950
WLAN6G UNII5	1.5	0.950	0.950	0.950	2.540	0.950
WLAN6G UNII6	1.5	0.950	0.950	0.950	2.540	0.950
WLAN6G UNII7	1.5	0.950	0.950	0.950	2.540	0.950
WLAN6G UNII8	1.5	0.950	0.950	0.950	2.540	0.950
RFID	1	1.060	1.060	1.060	2.850	1.060
Bluetooth	1.5	0.950	0.950	0.950	2.540	0.950

To account for total uncertainty, SAR_design_target should be determined as:

$$SAR_{design_target} < SAR_{regulatory_limit} \times 10^{\frac{-total\ uncertainty}{10}}$$

<P_{limit} for supported technologies and bands (P_{limit} in EFS file)>

Band	Head	Hotspot	Body Worn / Extremity	Extremity	Sensor OFF	P _{max} *
	(DSI4)	(DSI2)	(DSI3)	(DSI1)	(DSI0)	
WLAN2.4G	21.2	20.8	20.8	24.9	27.5	20.5
WLAN5.2G	20.4	15.2	17.7	19.6	21.3	19.5
WLAN5.3G	20.4		17.7	19.6	21.4	19.5
WLAN5.5G	20.1		15.7	18.5	20.7	19.5
WLAN5.8G	20.6	14.9	16.2	19	21.9	20.0
WLAN6G UNII5_SP_LPI	15.5		9.5	9.5	15.5	19.5
WLAN6G UNII6_SP_LPI	15.5		9.5	9.5	17.4	19.5
WLAN6G UNII7_SP_LPI	15.5		9.5	9.5	17.4	19.5
WLAN6G UNII8_SP_LPI	15.5		9.5	9.5	18.2	20.0
WLAN6G UNII5_VLP	15.5	9.5	9.5	9.5	15.5	7.5
WLAN6G UNII6_VLP	15.5	9.5	9.5	9.5	17.4	7.5
WLAN6G UNII7_VLP	15.5	9.5	9.5	9.5	17.4	7.5
WLAN6G UNII8_VLP	15.5	9.5	9.5	9.5	18.2	7.5
RFID		27.3	27.5	30.6	31.2	25.0
Bluetooth	20.3	19.6	19.6	21.7	25.8	13.7

Note:

1. P_{max} is used for RF tune up procedure. The maximum allowed output power is equal to P_{max} + Total uncertainty.
2. The max allowed output power is the P_{limit} + Total uncertainty, and if P_{limit} is higher than P_{max}, the device output power will be P_{max} instead.
3. above P_{limit} is single chain output power, MIMO = single chain power plus 3dB