



Certification Exhibit

FCC ID: GV3-20Z3X00

FCC Rule Part: 47 CFR Part 2.1091

TÜV SÜD Project Number: 72159794

Manufacturer: ACCO Brands USA LLC
Model: Z-2500; Z-3500

RF Exposure

General Information:

Applicant: ACCO Brands USA LLC
Device Category: Mobile
Environment: General Population/Uncontrolled Exposure

The model Z-2500; Z-3500 2.4GHz proprietary radio is collocated and transmits simultaneously with the GT-Tronics BLE and 802.11 (Model EC864FPA; FCCID: B4OEC864FPA) radios.

Technical Information:**Table 1: Technical Information**

Detail	Z-2500; Z-3500 2.4GHz Proprietary (A)	GT-Tronics BLE (B)	GT-Tronics 802.11 (C)
Frequency Range	2402 – 2480MHz	2402 – 2480MHz	2412 – 2462MHz
Number of Channels	39	39	11
Modulation Format	GFSK	GFSK	802.11b/g/n20
Antenna Type / Gain	PCB Trace Antenna / 2.0 dBi	PCB Antenna / -0.30dBi	PCB Antenna / 2dBi

MPE Calculation:

The Power Density (mW/cm²) is calculated as follows:

$$S = \frac{PG}{4\pi R^2}$$

Where:

S = power density (in appropriate units, e.g. mW/cm²)

P = power input to the antenna (in appropriate units, e.g., mW)

G = power gain of the antenna in the direction of interest relative to an isotropic radiator

R = distance to the center of radiation of the antenna (appropriate units, e.g., cm)

Table 2: MPE Calculation (Including Collocated Devices)

Transmit Frequency (MHz)	Radio Power (dBm)	Power Density Limit (mW/Cm ²)	Radio Power (mW)	Antenna Gain (dBi)	Antenna Gain (mW eq.)	Distance (cm)	Power Density (mW/cm ²)	Radio
2402	-5.48	1.00	0.28	2	1.585	20	0.00009	A
2402	3.42	1.00	2.20	-0.3	0.933	20	0.00041	B
2412	17.64	1.00	58.08	2	1.585	20	0.01831	C

Summation of MPE ratios – Simultaneous Transmissions

This device contains multiple transmitters which can operate simultaneously; therefore the maximum RF exposure is determined by the summation of MPE ratios. The limit is such that the summation of MPE ratios is ≤ 1.0.

Table 3: Summation of MPE Ratios

	Scenario 1	Scenario 2	Scenario 3
Radio A	x	x	x
Radio B	x		x
Radio C		x	x
Radio A MPE Ratio	0.00009	0.00009	0.00009
Radio B MPE Ratio	0.00041		0.00041
Radio C MPE Ratio		0.01831	0.01831
MPE Ratio Summation:	0.00050	0.01840	0.01881