RF EXPOSURE REPORT

REPORT NO.: SA980929H05

MODEL NO.: BTD-1M3, BT-523

ACCORDING: FCC Guidelines for Human Exposure
IEEE C95.1

APPLICANT : Mobility Sound Technology Ltd.

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ISSUED BY: Bureau Veritas Consumer Products Services (H.K.) Ltd., Taoyuan Branch

TEST LOCATION: No. 81-1, Lu Liao Keng, 9th Ling, Wu Lung Tsuen, Chiung Lin Hsiang, Hsin Chu Hsien 307, Taiwan

No SAR Evaluation Required if power is below the following threshold:

Tunable Range			
F(GHz) Low	F(GHz) High	Center of Tunable Band (GHz)	60/f SAR Limitation (mW)
2.402	2.480	2.441	24.19

Maximum measured transmitter power:

Pout Conducted (dBm)	Pout Conducted (mW)	Maximum Antenna Gain (dBi)	Pout EIRP (mW)
5.93	3.917	0	3.917

Threshold for no SAR evaluation is 24.19 mW
Maximum TX Power is 3.917 mW Conducted and 3.917 mW EIRP

Conclusion: No SAR evaluation required since maximum Transmitter Pout (both conducted and EIRP) is below FCC threshold

BT and Walkie-Talkie collocation consideration

Normally the DUT (Bluetooth Dongle) works with a max 50% DF Walkie-Talkie. Below is how max allowable collocated power was calculated:

(1)

Channel Frequency (MHz)	Output Power to Antenna (mW) (EIRP)	Power Density (mW/cm^2)	Limit of Power Density (mW/cm^2)
450	1479.108	0.294	0.3

NOTE: Limit of power density = 450 (MHz) to 1500 = 0.3

(2)

Push-to-talk (PTT) devices

RF exposure is evaluated with a duty factor of 50% when the actual operating duty factor is ≤ 50%.27 Devices supporting higher duty factors shall be evaluated at the maximum duty factor

(3) the max Bluetooth eirp output power is 4 mW.

According to (1)(2) and (3) **The maximum allowable eirp output power for Walkie-Talkie should be less than (1479 mW x 2) - 4= 2954 mW**

CONCLUSION:

Both of the BT and Walkie-Talkie can transmit simultaneously, the formula of calculated the collocated MPE is:

$CPD_1 / LPD_1 + CPD_2 / LPD_2 + ……etc. < 1$

CPD = Calculation power density

LPD = Limit of power density

Therefore, the worst-case situation is 0.294 / 0.3 + 0.001 / 1 = 0.982, which is less than “1”. This confirmed that the device comply with FCC 1.1310 MPE limit.