



Maximum Permissible Exposure

FCC ID: K7T-RB8762C

APPLICANT: Radicom Research, Inc.

Application Type: Certification

Product: BT Module

Model No.: RB8762C, RB8762CJF-a, RB8762CJF-c, RB8762CKF-a, RB8762CKF-c, RB8762CMF-a, RB8762CMF-c, RB8762CJF-a-HM, RB8762CJF-c-HM, RB8762CJK-a-HM, RB8762CKF-c-HM, RB8762CMF-a-HM, RB8762CMF-c-HM, RB8362CJF-a-HM, RB8362CJF-c-HM, RB8362CKF-a-HM, RB8362CKF-c-HM, RB8362CMF-a-HM, RB8362CMF-c-HM, RB8762CJF-a-RA, RB8762CJF-c-RA, RB8762CKF-a-RA, RB8762CKF-c-RA, RB8762CMF-a-RA, RB8762CMF-c-RA, RB8762CS, RB8762C-U, RB88762C-S, RB8762CS-S, RB8762CS-U, RB8762CS-RA

Brand Name: Radicom

FCC Rule Part(s): Part 2.1091 (Mobile)

Test Date: September 7, 2021

Tested By : *Fran Chen*
 (Fran Chen)

Reviewed By : *Paddy Chen*
 (Paddy Chen)

Approved By : *Chenz Ker*
 (Chenz Ker)



Testing Laboratory
3261


The test results relate only to the samples tested.
 This equipment has been shown to be capable of compliance with the applicable technical standards as indicated in the measurement report. Test results reported herein relate only to the item(s) tested.
 The test report shall not be reproduced except in full without the written approval of MRT Technology (Taiwan) Co., Ltd.

Revision History

Report No.	Version	Description	Issue Date	Note
2107TWI101-U2	1.0	Original Report	2021-10-01	

1. PRODUCT INFORMATION

1.1. Equipment Description

Product Name	BT Module
Model No.	RB8762C, RB8762CJF-a, RB8762CJF-c, RB8762CKF-a, RB8762CKF-c, RB8762CMF-a, RB8762CMF-c, RB8762CJF-a-HM, RB8762CJF-c-HM, RB8762CJK-a-HM, RB8762CKF-c-HM, RB8762CMF-a-HM, RB8762CMF-c-HM, RB8362CJF-a-HM, RB8362CJF-c-HM, RB8362CKF-a-HM, RB8362CKF-c-HM, RB8362CMF-a-HM, RB8362CMF-c-HM, RB8762CJF-a-RA, RB8762CJF-c-RA, RB8762CKF-a-RA, RB8762CKF-c-RA, RB8762CMF-a-RA, RB8762CMF-c-RA, RB8762CS, RB8762C-U, RB88762C-S, RB8762CS-S, RB8762CS-U, RB8762CS-RA
Trademark	
Supports Radios Spec.	Bluetooth: V5.1 LE
Frequency Range	2402~2480MHz
Type of Modulation	GFSK

Note:

1. Model difference is for business issue and marketing requirement, the hardware is the same.
2. The test was performed base on RB8762C.

1.2. Antenna Description

No.	Manufacturer	Part No.	Antenna Type	Peak Gain
1	Radicom	RB8762C	PCB	-0.5dBi
2	BRITO TECHNOLOGY	WF1DI-2AB(C)	Dipole	2.0dBi

2. MAXIMUM PERMISSIBLE EXPOSURE (MPE)

2.1. FCC Limits

According to FCC 1.1310: The criteria listed in the following table shall be used to evaluate the environment impact of human exposure to radio frequency (RF) radiation as specified in 1.1307(b)

LIMITS FOR MAXIMUM PERMISSIBLE EXPOSURE (MPE)

Frequency Range (MHz)	Electric Field Strength (V/m)	Magnetic Field Strength (A/m)	Power Density (mW/cm ²)	Average Time (Minutes)
(A) Limits for Occupational/ Control Exposures				
0.3-3.0	614	1.63	*100	6
3.0-30	1842/f	4.89/f	*900/f ²	6
30-300	61.4	0.163	1.0	6
300-1500	--	--	f/300	6
1500-100,000	--	--	5	6
(B) Limits for General Population/ Uncontrolled Exposures				
0.3-1.4	614	1.63	*100	30
1.34-30	824/f	2.19/f	*180/f ²	30
30-300	27.5	0.073	0.2	30
300-1500	--	--	f/1500	30
1500-100,000	--	--	1.0	30

Note : (1) f= Frequency in MHz , (2) * = Plane-wave equivalent power density

Calculation Formula:

$$Pd = (Pout * G) / (4 * pi * r^2)$$

Where

Pd = power density in mW/cm²

Pout = output power to antenna in mW

G = gain of antenna in linear scale

Pi = 3.1416

r = distance between observation point and center of the radiator in cm

Under normal use condition, is at least 20cm away from the body of the user .

So, this device is classified as **Mobile Device**.

2.2. Test Result

Band (MHz)	Frequency (MHz)	Output Power (dBm)	Output Power (mW)	Antenna Gain (dBi)	Distance (cm)	Power Density (mW/cm ²)	Limit (mW/cm ²)
BLE 5.1	2402 ~ 2480	4	2.51	2	20	0.0008	1

————— The End —————