

# FCC ID: 2BEF7-KB-BC70

## **RF Exposure Evaluation**

FCC KDB publication 447498 D01 General RF Exposure Guidance v06: Mobile and Portable Devices RF Exposure Procedures and Equipment Authorization Policies.

### Limits

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)

Frequency range (MHz)	Electric field strength (V/m)	Magnetic field strength (A/m)	Power density (mW/cm²)	Averaging time (minutes)					
of the stime of	(A) Limits	for Occupational/Controlled	Exposures	AND CONTRACT					
0.3–3.0 614 1.63 *(100) 6									
3.0–30	1842/f	4.89/f	*(900/f <sup>2</sup> )	6 6 ft 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1					
30-300	61.4	0.163	1.0 ST A	ETTAL 6 COLLET					
300–1500	AP STAND OF THE	Stand of the stand	f/300	te testing 6 00 cte					
1500–100,000	of the still and of	The star of the start and	6 6 5 5 5 T	of the former of					
Mar of the strange	(B) Limits for (	General Population/Uncontro	olled Exposure	a a the stime					
0.3–1.34	614	ے <sup>م</sup> ر کر 1,63 کے <sup>م</sup> ر ک	*(100)	STING 30 AS ST					
1.34–30	824/f	2.19/f	*(180/f²)	19 JN 30 6 X					
30–300	27.5	0.073	0.2	S (230 €					
300–1500	a chilles the me	a the star a a the	f/1500	30 5 10					
1500–100,000	the second star	A C A A A A A A A A A A A A A A A A A A	1.0° chi je	STATING 30 STATISTIC					

Limits for Maximum Permissible Exposure (MPE)

f = frequency in MHz

Friis transmission formula: Pd = (Pout\*G)/(4\*pi\*r<sup>2</sup>)

#### Where

Pd = power density in mW/cm<sup>2</sup>, 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

Pd id the limit of MPE, 1 mW/cm<sup>2</sup>. If we know the maximum gain of the antenna and the total power input to the antenna, through the calculation, we will know the distance r where the MPE limit is reached.

### **Test Procedure**

Software provided by client enabled the EUT to transmit and receive data at lowest, and highest channel individually.

# Shenzhen QC Testing Laboratory Co., Ltd.

### Test Result of RF Exposure Evaluation

### Antenna gain=-0.58dBi

For BT

Test Frequency (MHz)	Minimum Separation Distance (cm)	Output Power (dBm)	Target power (dBm)	Target power (mW)	Antenna Gain (Numeric)	Power Density Limit (mW/cm <sup>2</sup> )	Power Density At 20 cm (mW/cm <sup>2</sup> )	Test Results
2402	20.00	2.4	2±1	1.995	0.87		0.0003	Pass
2441	20.00	2.52	2±1	1.995	0.87	ATT OF	0.0003	Pass
2480	20.00	2.27	2±1	1.995	0.87	The Armene	0.0003	Pass

#### For BLE

Test Frequency (MHz)	Minimum Separation Distance (cm)	Output Power (dBm)	Target power (dBm)	Target power (mW)	Antenna Gain (Numeric)	Power Density Limit (mW/cm <sup>2</sup> )	Power Density At 20 cm (mW/cm <sup>2</sup> )	Test Results
2402	20.00	1.15	1±1 0	1.585	0.87		0.0003	Pass
2440	20.00	1.36	₀ 1±1 ×	1.585	0.87	A STILLE	0.0003	Pass
2480	20.00	1.01	1±1	1.585	0.87	S A Star	0.0003	Pass

The measurement results comply with the FCC Limit per 47 CFR 2.1091 for the uncontrolled RF Exposure.

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