

# **RF Exposure evaluation**

## Model: BLE Link 8413-001

## FCC ID 2ARHA-C00005

#### **RF Exposure Evaluation**

Standards	
OET Bulletin 65 Edition 97-01 August 1997	
FCC 47 CFR §1.1307	
FCC 47 CFR §1.1310	

### Test limits

As specified in Table 1B of 47 CFR 1.1310 – Limits for Maximum Permissible Exposure (MPE), Limits for General Population/Uncontrolled Exposure.

Frequency range (MHz)	Power density (mW/cm <sup>2</sup> )			
300 – 1,500	f/1500			
1,500 - 100,000	1.0			

Equation OET bulletin 65, page 18, edition 97-01:  $S = \frac{PG}{4\pi R^2} = \frac{EIRP}{4\pi R^2}$ 

Where:

S = power density

P = power input to the antenna

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

Following max. antenna gain values were considered as far as they apply:

Part	Cable length	Туре	Avg. gain	Max. gain
2J6602B-050LL100-C20NST	0,5 m	Puck Antenna	-3.1 dB	4.9 dBi
2J6602B-250LMR100-C20N	2 m	Puck Antenna	-3.1 dB	4.9 dBi
Taoglas , WSA.2400.A.101151	1 m	Flatbar Antenna	-2.49 dBi	2.21 dBi



Band	Mode	Duty Cycle	Frequency (MHZ)	Maximum Conducted output power (dBm)	Equivalent conducted output power (mW)	FCC MPE Limit (mW/cm²)	MPE Value using Max gain	Separation distance (cm)	Verdict
	GFSK 1-								
Bluetooth	DH1	100.0%	2441.0	7.8	6.03	1000	0.0037	20	PASS

Yours sincerely,

Imad Hjije

Imad Hjije