

#### RF EXPOSURE EVALUATION

## **EUT Specification**

EUT	Bluetooth Beacon				
Model Number	M4P, eTA1, M4P-PNHAX, M4P-PNHNX, M4P-PNHN, M4P-PNHA,				
	M4 Pro				
FCC ID	2AO94- M4PRO				
Antenna gain (Max)	-0.7dBi				
Operation Frequency	2402-2480MHz				
Input Rating	DC 3.0V				
Standard	47 CFR Part 1.1307 47 CFR Part 1.1310 KDB447498D01				
	General RF Exposure Guidance v06				
Modulation	BLE				

# **Standard Requirement**

According to KDB447498D01 General RF Exposure Guidance v06

### Standalone SAR test exclusion considerations

Unless specifically required by the published RF exposure KDB procedures, standalone 1-g head or body and 10-g extremity SAR evaluation for general population exposure conditions, by measurement or numerical simulation, is not required when the corresponding SAR Exclusion Threshold condition, listed below, is satisfied.

#### Limits

The 1-g and 10-g SAR test exclusion thresholds for 100 MHz to 6 GHz at test separation distances  $\leq 50$  mm are determined by: [(max. power of channel, including tune-up tolerance, mW)/(min. test separation distance, mm)] • [ $\sqrt{f(GHz)}$ ]  $\leq 3.0$  for 1-g SAR and  $\leq 7.5$  for 10-g extremity SAR, where • f(GHz) is the RF channel transmit frequency in GHz • Power and distance are rounded to the nearest mW and mm before calculation17 • The result is rounded to one decimal place for comparison. The test exclusions are applicable only when the minimum test separation distance is  $\leq 50$  mm and for transmission frequencies between 100 MHz and 6 GHz. When the minimum test separation distance is < 5 mm, a distance of 5 mm is applied to determine SAR test exclusion

Tel: 86-769-22607797

Fax: 86-769-22607907

http://www.cpcteam.com



### **Calculated Result and Limit**

Operation Mode: BLE								
Channel	Maximum	Tune up tolerance (dBm)	Maximum					
	Peak		tune-up Power					
	Conducted		(dBm)	(mW)	Calculated	Exclusion		
	Output				value	threshold		
	Power							
	(dBm)							
Lowest	1.68	1±1	2	1.58	0.49			
(2402MHz)	1.00	121	2	1.50	0.43			
Middle	1.52	1±1	2	1.58	0.49	3.0		
(2440MHz)						3.0		
Highest	1 42	1±1	2	1 50	0.50			
(2480MHz)	1.43	l±1		1.58	0.50			
Conclusion: the calculated value ≤3.0, SAR is exempted.								

The Maxinum power is less than the limit, complies with the exemption requirements, SAR is exempted.

Remark: The Max Conducted Peak Output Power data refer to report Report No.: 91108-24-72-24-PP001