RF Exposure Evaluation Statement

Product Name: Car Kit Bluetooth Module

Model No.： BT-MC89-JK1, BT-MC89-1A, BT-MC89-JK1A, BT-MC89-JK1B, BT-MC89-JK1C

FCC ID： ZWY89072

1.1 RF Exposure Compliance Requirement

1.1.1 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.

1.1.2 Limits

The 1-g and 10-g SAR test exclusion thresholds for 100 MHz to 6 GHz at test separation distances ≤ 50 mm are determined by:
[(max. power of channel, including tune-up tolerance, mW)/(min. test separation distance, mm)] ·
[$\sqrt{f(GHz)}$] ≤ 3.0 for 1-g SAR and ≤ 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 calculation[17]
    The result is rounded to one decimal place for comparison
The test exclusions are applicable only when the minimum test separation distance is ≤ 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

1.1.3 EUT RF Exposure

Channel	Maximum Peak Conducted Output Power (dBm)	Tune up tolerance (dB)	Maximum tune-up Power (dBm)	(mW)	Calculated value	Exclusion threshold
Operational Mode: EDR （8-DPSK worst case）						
2402MHz	0.02	±1	1.02	1.26	0.39	
2441MHz	0.27	±1	1.27	1.34	0.42	3.0
2480MHz	0.11	±1	1.11	1.29	0.41	
Operational Mode: BLE （worst case）						
2402MHz	0.92	±1	1.92	1.56	0.48	
2442MHz	1.22	±1	2.22	1.67	0.52	3.0
2480MHz	0.98	±1	1.98	1.58	0.50	
Conclusion: the calculated value ≤3.0, SAR is exempted.						