FCC ID : 2A4E8-TELEHEER

➢ Test Standards and Limits

1. According to KDB 447498 D01 v06, Section 4.3.1

2. FCC Radiofrequency radiation exposure 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)/(min test separation distance)]*[√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
• The result is rounded to one decimal place for comparison
• 3.0 and 7.5 are referred to as the numeric thresholds
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 according to 4.1 f) is applied to determine SAR test exclusion.
For 2.4G band device, the limit of worse case is
P_{max}≤3.0*D_{min})/ f =3.0*5/ 2.480 =9.525mW

➢ Measurement and Calculation

1. Maximum transmit power

Antenna Gain: 2 dBi

Operation Mode	Moduletion	Channel Number	Channel Frequency (MHz)	Measurement Level (dBm)
Bluetooth DSS	GFSK	0	2402	1.01
		39	2441	1.76
		78	2480	2.23
	π/4-DQPSK	0	2402	1.62
		39	2441	2.37
		78	2480	2.73
	8DPSK	0	2402	2.69
		39	2441	3.50
		78	2480	3.96

2. MPE Calculation

The Max Conducted Peak Output Power is 3.96 dBm.
The Max Antenna Gain is 2 dBi.

According to the formula. calculate the EIRP test result:
EIRP= P x G = 2.49 mW x 1.58 = 3.93mW < 9.525mW

So the SAR report is not required.

-End of the Report-