

Radio frequency radiation exposure evaluation: portable devices

1.1 Radio Frequency Exposure Compliance

1.1.1 Electromagnetic Fields

RESULT:

Pass

Test Specification

- Test item : AMP Bridge
- Identification / Type No. : AMP USB Bridge WiFi and RF
- FCC ID : 2AU29AMPRFWIFIUSBV3
- IC : 25624-AMPRFWIFIV3
- Test standard : CFR47 FCC Part 2: Section 2.1093
FCC KDB Publication 447498 v06
RSS-102 Issue 5

FCC Limit:

MHz	5	10	15	20	25	mm
150	39	77	116	155	194	<i>SAR Test Exclusion Threshold (mW)</i>
300	27	55	82	110	137	
450	22	45	67	89	112	
835	16	33	49	66	82	
900	16	32	47	63	79	
1500	12	24	37	49	61	
1900	11	22	33	44	54	
2450	10	19	29	38	48	
3600	8	16	24	32	40	
5200	7	13	20	26	33	
5400	6	13	19	26	32	
5800	6	12	19	25	31	

ISED Limit:

Table 1: SAR evaluation — Exemption limits for routine evaluation based on frequency and separation distance^{4,5}

Frequency (MHz)	Exemption Limits (mW)				
	At separation distance of ≤5 mm	At separation distance of 10 mm	At separation distance of 15 mm	At separation distance of 20 mm	At separation distance of 25 mm
≤300	71 mW	101 mW	132 mW	162 mW	193 mW
450	52 mW	70 mW	88 mW	106 mW	123 mW
835	17 mW	30 mW	42 mW	55 mW	67 mW
1900	7 mW	10 mW	18 mW	34 mW	60 mW
2450	4 mW	7 mW	15 mW	30 mW	52 mW
3500	2 mW	6 mW	16 mW	32 mW	55 mW
5800	1 mW	6 mW	15 mW	27 mW	41 mW

Measurement Record:

$$\text{EIRP[dBm]} = \text{E[dBuV/m]} - 95.2$$

Since maximum peak output power of the transmitter is $-16.45 \text{ dBm} \approx 0.023 \text{ mW} < 22 \text{ mW}$.

Hence the EUT is excluded from SAR evaluation according to FCC KDB Publication 447498 D01 General RF Exposure Guidance v06 and RSS-102 Issue 5.