

TEST REPORT

Product Name : Transceiver
Brand Mark : N/A
Model No. : MK02
Extension Model : MK04, MK06, MK07, MK08
FCC ID : 2A6ET-RT6202
Report Number : BLA-EMC-202311-A1403
Date of Sample Receipt : 2023/11/3
Date of Test : 2023/11/4 to 2023/11/10
Date of Issue : 2023/11/13
Test Standard : 47 CFR Part 15, Part1.1307
47 CFR Part 15, Part2.1093
KDB447498D04 General RF Exposure
Guidance v01
Test Result : Pass

Prepared for:

ShenZhen Ankbit Electronics Limited
Room 401, Building B, Runfeng Industrial Park, No. 4197 Baoan Blvd.,
Xixiang St., Baoan Dist., Shenzhen, China

Prepared by:

BlueAsia of Technical Services(Shenzhen) Co.,Ltd.
Building C, No. 107, Shihuan Road, Shiyuan Sub-District, Baoan District,
Shenzhen, Guangdong Province, China
TEL: +86-755-23059481

Compiled by:

Lucas

Review by:

Sueels

Approved by:

Blue Zheng

Date:

2023/11/13



REPORT REVISE RECORD

Version No.	Date	Description
00	2023/11/13	Original

BLUEASIA

TABLE OF CONTENTS

1 TEST SUMMARY	4
2 GENERAL INFORMATION	5
3 GENERAL DESCRIPTION OF E.U.T.	5
4 LABORATORY LOCATION	6
5 RF EXPOSURE COMPLIANCE REQUIREMENT	7
5.1 STANDARD REQUIREMENT	7
5.2 LIMITS	7

BLUEASIA

1 TEST SUMMARY

Test item	Test Requirement	Test Method	Class/Severity	Result
RF Exposure	47 CFR Part 1.1307, Part 2.1093, KDB 447498	CFR 47 Part 2.1093	CFR 47 Part 2.1093	PASS

BLUEASIA

2 GENERAL INFORMATION

Applicant	ShenZhen Ankbit Electronics Limited
Address	Room 401, Building B, Runfeng Industrial Park, No. 4197 Baoan Blvd., Xixiang St., Baoan Dist., Shenzhen, China
Manufacturer	ShenZhen Ankbit Electronics Limited
Address	Room 401, Building B, Runfeng Industrial Park, No. 4197 Baoan Blvd., Xixiang St., Baoan Dist., Shenzhen, China
Factory	ShenZhen Ankbit Electronics Limited
Address	Room 401, Building B, Runfeng Industrial Park, No. 4197 Baoan Blvd., Xixiang St., Baoan Dist., Shenzhen, China
Product Name	Transceiver
Test Model No.	MK02
Extension Model	MK04, MK06, MK07, MK08
Remark	All above models are identical in the same PCB layout, interior structure and electrical circuits. The differences are model name for commercial purpose.

3 GENERAL DESCRIPTION OF E.U.T.

Hardware Version	RT6202-V4
Software Version	6202_Q16_MK02_QCC3024_SPEAKERv1.8-8db28_MonoRight0Db
Operation Frequency:	2402MHz-2480MHz
Modulation Type:	GFSK,pi/4DQPSK,8DPSK
Channel Spacing:	1MHz
Number of Channels:	79
Antenna Type:	PCB Antenna
Antenna Gain:	-0.58dBi(Provided by the customer)

4 LABORATORY LOCATION

All tests were performed at:
BlueAsia of Technical Services(Shenzhen) Co.,Ltd.
Building C, No. 107, Shihuan Road, Shiyan Sub-District, Baoan District, Shenzhen, Guangdong Province, China
Telephone: TEL: +86-755-28682673 FAX: +86-755-28682673
No tests were sub-contracted.

BLUEASIA

5 RF EXPOSURE COMPLIANCE REQUIREMENT

5.1 STANDARD REQUIREMENT

According to 447498 D04 Interim General RF Exposure Guidance v01

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.

5.2 LIMITS

$$P_{th} \text{ (mW)} = \begin{cases} ERP_{20 \text{ cm}} (d/20 \text{ cm})^x & d \leq 20 \text{ cm} \\ ERP_{20 \text{ cm}} & 20 \text{ cm} < d \leq 40 \text{ cm} \end{cases} \quad (\text{B.2})$$

where

$$x = -\log_{10} \left(\frac{60}{ERP_{20 \text{ cm}} \sqrt{f}} \right)$$

and f is in GHz, d is the separation distance (cm), and $ERP_{20 \text{ cm}}$ is per Formula (B.1).

Example values shown in Table B.2 are for illustration only.

Table B.2—Example Power Thresholds (mW)

Frequency (MHz)	Distance (mm)									
	5	10	15	20	25	30	35	40	45	50
300	39	65	88	110	129	148	166	184	201	217
450	22	44	67	89	112	135	158	180	203	226
835	9	25	44	66	90	116	145	175	207	240
1900	3	12	26	44	66	92	122	157	195	236
2450	3	10	22	38	59	83	111	143	179	219
3600	2	8	18	32	49	71	96	125	158	195
5800	1	6	14	25	40	58	80	106	136	169

$$P_{th} \text{ (mW)} = ERP_{20 \text{ cm}} \text{ (mW)} = \begin{cases} 2040f & 0.3 \text{ GHz} \leq f < 1.5 \text{ GHz} \\ 3060 & 1.5 \text{ GHz} \leq f \leq 6 \text{ GHz} \end{cases} \quad (\text{B.1})$$

Ant gain = -0.58dBi

Max Output power = -0.928dBm @BR@ 2441MHz

ERP = -0.928dBm - 0.58dBi - 2.15 = -3.658dBm

So

worse case :

$10^{-0.3658} = 0.431\text{mW} < 2.75\text{ mW}$

Comply with RF exposure exemption limit.

Then SAR evaluation is not required

----END OF REPORT----

The test report is effective only with both signature and specialized stamp, The result(s) shown in this report refer only to the sample(s) tested. Without written approval of BlueAsia, this report can't be reproduced except in full.