

RF Exposure

Applicant : Dongguan Hele Electronics Co.,Ltd
Room101, Block1, No.38, Daojiao Daohou Road,
Address : Daojiao Town, Dongguan City, Guangdong Province,
China
Product Name : Smart watch
Brand Mark : QCY
Model : WA24S10A
FCC ID : RDR-WA24S10A
Report Number : BLA-EMC-202509-A6704
Date of Receipt : Sep. 19, 2025
Date of Test : Sep. 19, 2025 to Oct. 20, 2025
47 CFR Part 15, Part1.1307
Test Standard : 47 CFR Part 15, Part2.1093
KDB447498D04 General RF Exposure Guidance v01
Test Result : Pass

Compiled by: *Hugh*Review by: *Xavier*Approved by: *Blue Zheng*

Issued Date: May 21, 2025

BlueAsia of Technical Services(Shenzhen) Co.,Ltd.Address: Building C, No. 107, Shihuan Road, Shiyan Sub-District, Baoan District,
Shenzhen, Guangdong Province, China

The test report is effective only with both signature and specialized stamp and 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. The results described in this report do not represent the quality or characteristics of the sampled batch, nor do they represent any similar or identical products that are not explicitly stated.

Table of Contents

1	General information	4
1.1	General information	4
1.2	General description of EUT	4
2	Laboratory and accreditations	6
3	RF Exposure Compliance Requirement	7
3.1	Standard Requirement	7
3.2	Limits	7
3.3	Result	8

Revise Record

Version No.	Date	Description
01	Oct. 20, 2025	Original

BlueAsia

1 General information

1.1 General information

Applicant	Dongguan Hele Electronics Co.,Ltd
Address	Room101, Block1, No.38, Daojiao Daohou Road, Daojiao Town, Dongguan City, Guangdong Province, China
Manufacturer	Dongguan Hele Electronics Co.,Ltd
Address	Room101, Block1, No.38, Daojiao Daohou Road, Daojiao Town, Dongguan City, Guangdong Province, China
Factory	Dongguan Hele Electronics Co.,Ltd
Address	Room101, Block1, No.38, Daojiao Daohou Road, Daojiao Town, Dongguan City, Guangdong Province, China

1.2 General description of EUT

Product name	Smart watch
Model no.	WA24S10A
Series model	N/A
Power supply or adapter information	DC3.87V by battery
Hardware Version	N/A
Software Version	N/A

BLE:

Operation Frequency:	2402MHz-2480MHz
Modulation Type:	GFSK
Rate data:	1Mbps; 2Mbps
Channel Spacing:	2MHz
Number of Channels:	40
Antenna Type:	Internal antenna
Antenna Gain:	-4.5dBi(Provided by customer)

BT:

Operation Frequency:	2402MHz-2480MHz
Modulation Type:	GFSK, pi/4DQPSK, 8DPSK
Channel Spacing:	1MHz
Number of Channels:	79
Antenna Type:	Internal antenna
Antenna Gain:	-4.5dBi(Provided by customer)

2 Laboratory and accreditations

The test facility is recognized, certified, or accredited by the following organizations:

Company name:	BlueAsia of Technical Services(Shenzhen) Co., Ltd.
Address:	Building C, No. 107, Shihuan Road, Shiyan Sub-District, Baoan District, Shenzhen, Guangdong Province, China
CNAS accredited No.:	L9788
A2LA Cert. No.:	5071.01
FCC Designation No.:	CN1252
ISED CAB identifier No.:	CN0028
Telephone:	+86-755-28682673
FAX:	+86-755-28682673

3 RF Exposure Compliance Requirement

3.1 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.

3.2 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

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

3.3 Result

$$\text{EIRP} = \text{pt} \times \text{gt} = (\text{E} \times \text{d})^2 / 30$$

Where:

pt = transmitter output power in watts,

gt = numeric gain of the transmitting antenna (unitless),

E = electric field strength in V/m,

d = measurement distance in meters (m)

$$\text{Spot} = (\text{E} \times \text{d})^2 / 30 \times \text{gt}$$

Separation distance = 0.5cm

Ant gain = -4.5dBi

For BLE(Worst):

Max Output power = -6.318dBm @ 2442MHz

$$\text{EIRP} = -6.318\text{dBm} - 4.5\text{dBi} = -10.818\text{dBm} = 0.083\text{mW} < 2.707\text{mW}$$

$$\text{ERP} = -10.818 - 2.15 = -12.968\text{dBm}$$

Comply with RF exposure exemption limit.

For BLE(Worst):

Max Output power = -3.703dBm @ 2441MHz

$$\text{EIRP} = -3.703\text{dBm} - 4.5\text{dBi} = -8.203\text{dBm} = 0.151\text{mW} < 2.706\text{mW}$$

$$\text{ERP} = -8.203 - 2.15 = -10.353\text{dBm}$$

Comply with RF exposure exemption limit.

----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.