




# 시험 성적서 TEST REPORT

페이지(page) : ( 1 ) / ( 총(Total) 6 )

성적서 번호 Report No.		ICRT-TR-E221608-0A	
신청자 Client	기관명 Name	AISOLUTION CO., LTD	
	주소 Address	28-4, Samyang-ro 29gil, Gangbuk-gu, Seoul, 01194, Republic of Korea	
시험대상품목 Sample description		KDC180 Bluetooth Barcode Scanner	
모델명 Type designation		KDC180	
정격 Ratings		DC 3.7 V	
시험장소 Place of test		<input checked="" type="checkbox"/> 고정시험(Inside test) <input type="checkbox"/> 현장시험(Field test) 주소지(Address): 112, Hwanggeum 3-ro 7beon-gil, Hagun-ri, Yangchon-eup, Gimpo-si, Gyeonggi-do, Korea	
시험기간 Date of test		17. Jun. 2022 ~ 28. Jun. 2022	
시험방법/항목 Test Method/Item		FCC rule §1.1310	
시험결과 Test Results		Refer to 3. Maximum Permissible Exposure	
확인 Affirmation	작성자 Tested by	기술책임자 Technical Manager	
	성명 Name	성명 Name	
	Yeong-Hwan, Hong (서명) (Signature)	Min-Gi, Son (서명) (Signature)	
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### Revision History

Issued Report No.	Issued Date	Revisions	Effect Section
ICRT-TR-E221608-0A	29-JUN-2022	Initial Issue	All



# **1. Applicant & Manufacturer & Test Laboratory Information**

## **1.1 Applicant information**

Applicant	AISOLUTION CO., LTD
Address	28-4, Samyang-ro 29gil, Gangbuk-gu, Seoul, 01194, Republic of Korea
Contact Person	Seoneyong Kim
Telephone No.	82-01-9876-3482
Fax No.	82-07-8260-3731
E-mail	seonyeong.kim@koamtac.com

## **1.2 Manufacturer Information**

Manufacturer	AISOLUTION CO., LTD
Address	28-4, Samyang-ro 29gil, Gangbuk-gu, Seoul, 01194, Republic of Korea

## **1.3 Test Laboratory Information**

Conducted tests were performed at	
Laboratory	ICR Co., Ltd.
Address	112, Hwanggeum 3-ro 7beon-gil, Hagun-ri, Yangchon-eup, Gimpo-si, Gyeonggi-do, Korea
Telephone No.	+82-2-6351-9002
Fax No.	+82-2-6351-9007
RRA No.	KR0165
KOLAS No.	KT652
Test Firm Registration Number	490614



## 2. Equipment under Test(EUT) Information

### 2.1 General Information

Product Name	KDC180 Bluetooth Barcode Scanner
Brand Name	KOAMTAC
Model Name	KDC180
Additional Model Name	-
FCC ID	VH9-KDC180
Hardware Version	1.0
Software Version	1.0
Power Supply	DC 3.7 V

### 2.2 Additional Information

Equipment Class	DTS-Digital Transmission System
Device Type	Stand-alone
Operating Frequency	2 402 MHz ~ 2 480 MHz
RF Output Power	-0.93 dBm
Number of Channel	40
Modulation Type	GFSK
Antenna Type	Chip Antenna
Antenna Gain	3.14 dBi
Antenna Operating Mode	Single Antenna Equipment with only one antenna
List of Each Oscillator or Crystal Frequency	32 MHz

### 2.3 Mode of operation during the test

- The EUT is continuous transmission mode during the test with set at Low Channel, Middle Channel, and High Channel. To get a maximum radiated emission levels from the EUT, the EUT was moved throughout the XY, YZ, XZ planes.

### 2.4 Modifications of EUT

- None



### 3. Maximum Permissible Exposure

#### 3.1 RF Exposure calculation

According to the FCC rule §1.1310 the limit for General Population/Uncontrolled exposure is 1 mW/cm<sup>2</sup> for the device operating 1 500 MHz ~ 100 000 MHz.

Kind of EUT	USB BLE Dongle
Operating Frequency Band	<input type="checkbox"/> WLAN(802.11b/g/n(HT20)): 2 412 MHz ~ 2 462 MHz <input type="checkbox"/> WLAN(802.11n(HT40)): 2 422 MHz ~ 2 452 MHz <input type="checkbox"/> WLAN: 5 180 MHz ~ 5 320 MHz / 5 500 MHz ~ 5 700 MHz <input type="checkbox"/> WLAN: 5 745 MHz ~ 5 825 MHz <input checked="" type="checkbox"/> Bluetooth: 2 402 MHz ~ 2 480 MHz
Max. Output Power	-0.93 dBm
Exposure Evaluation Applied	<input type="checkbox"/> MPE <input type="checkbox"/> SAR <input checked="" type="checkbox"/> N/A

#### 3.2 Result

According to the procedure, KDB 447498 D01, the standalone SAR test exclusion threshold is

$$[(\text{Max. Power of channel, including tune-up tolerance, mW}) / (\text{Min. test separation distance, mm})] \times [\sqrt{f(\text{GHz})}] < 3$$

$$= (0.91/5) \times \sqrt{2.402} = 0.28$$

Conclusion: The SAR test exclusion threshold is less than 3, so the device meets the RF Exposure Requirement and excluded SAR Test.

Operating Mode	Frequency (MHz)	Target Power W / tolerance	Max tune up power		Separation distance (mm)	RF exposure	Limit
		(dBm)	(dBm)	(mW)			
Bluetooth LE	2 402	-0.93 ± 0.5	-0.43	0.91	5.0	0.28	3.00

- END -