



시험 성적서

TEST REPORT

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성적서 번호 Report No.		ICRT-TR-E210881-0A	
신청자 Client	기관명 Name	ESONIC CO., LTD.	
	주 소 Address	Ilsin Building 10-19, LS-ro 166beon-gil, Gunpo-si, Gyeonggi-do, Korea	
시험대상품목 Sample description		MOBILE RECORDER	
모델명 Type designation		BR-25	
정 격 Ratings		DC 3.7 V	
시험기간 Date of test		24. Mar. 2021 ~ 25. Mar. 2021	
시험방법/항목 Test Method/Item		FCC rule §1.1310	
시험결과 Test Results		Refer to 3. Maximum Permissible Exposure	
확 인 Affirmation	작성자 Tested by	기술책임자 Technical Manager	
	성 명 Name	성 명 Name	
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Revision History

Issued Report No.	Issued Date	Revisions	Effect Section
ICRT-TR-E210881-0A	16-Apr-2021	Initial Issue	All



1. Applicant & Manufacturer & Test Laboratory Information

1.1 Applicant information

Applicant	ESONIC CO., LTD.
Address	Ilisin Building 10-19, LS-ro 166beon-gil, Gunpo-si, Gyeonggi-do, Korea
Contact Person	Park Jeong Kyun
Telephone No.	+82-31-427-8331
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E-mail	pjk@esonic.co.kr

1.2 Manufacturer Information

Manufacturer	ESONIC CO., LTD.
Address	Ilisin Building 10-19, LS-ro 166beon-gil, Gunpo-si, Gyeonggi-do, 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
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RRA No.	KR0165
KOLAS No.	KT652



2. Equipment under Test(EUT) Information

2.1 General Information

Product Name	MOBILE RECORDER
Brand Name	-
Model Name	BR-25
Additional Model Name	BR-25A, BR-25B, BR-25S, BR-25N
FCC ID	TG7BR-25
Hardware Version	1.0
Software Version	1.0
Power Supply	DC 3.7 V
EUT Serial Number	Test 1

1.1 Additional Information

Equipment Class	DSS - Frequency Hopping Spread Spectrum systems
Device Type	Stand-alone
Operating Frequency	2 402 MHz ~ 2 480 MHz
RF Output Power	2.34 dBm
Number of Channel	79
Modulation Type	GFSK / $\pi/4$ -DQPSK / 8DPSK
Antenna Type	PCB Antenna
Antenna Gain	1.47 dBi
Antenna Operating Mode	Single Antenna Equipment with only one antenna

1.2 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.

1.3 Modifications of EUT

- None



2. Maximum Permissible Exposure

2.1 RF Exposure calculation

According to the FCC rule §1.1310 the limit for General Population/Uncontrolled exposure is 1 mW/cm² for the device operating 1 500 MHz ~ 100 000 MHz.

Kind of EUT	50S	
Operating Frequency Band	☐ WLAN(802.11b/g/n(HT20)): 2 412 MHz ~ 2 462 MHz ☐ WLAN(802.11n(HT40)): 2 422 MHz ~ 2 452 MHz ☐ WLAN: 5 180 MHz ~ 5 320 MHz / 5 500 MHz ~ 5 700 MHz ☐ WLAN: 5 745 MHz ~ 5 825 MHz ☒ Bluetooth: 2 402 MHz ~ 2 480 MHz	
Max. Output Power	Bluetooth BDR	2.30 dBm
	Bluetooth EDR	2.04 dBm
Exposure Evaluation Applied	☐ MPE ☐ SAR ☒ N/A	

2.2 Result

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

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

$$= (32.14/30) \times \sqrt{2.480} = 1.687 \text{ at Bluetooth BDR}$$

$$= (3.84/30) \times \sqrt{2.480} = 0.201 \text{ at Bluetooth EDR}$$

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



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Operating Mode	Frequency (MHz)	Target Power (Average power) W / tolerance	Max tune up power		Separation distance (mm)	RF exposure	Limit
		(dBm)	(dBm)	(mW)			
Bluetooth BDR	2 480	2.05 ± 0.5	2.55	1.80	5	0.094	3.00
Bluetooth EDR	2 480	- 0.16 ± 0.5	0.34	1.08	5	0.057	3.00

- END OF REPORT.