

Test Report No.: 2411110503-SE-US-01

RF Exposure Report

FCC ID: 2ADQS-107002740

Applicant: Lautsprecher Teufel GmbH

Address: Budapester Str. 44 10787 Berlin Germany

Manufacturer: Guangzhou Panyu Juda Car Audio Equipment Co., Ltd.

Address: NO.5 Building ,No.139,Zhouxing Street,Dongchong Town,Nansha District,Guangzhou City,Guangdong Province,China

Product: ROCKSTER NEO

Brand(s): Teufel, Fender X Teufel

Test Model(s): ROCKSTER NEO

Series Model(s): ROCKSTER NEO. Fender X Teufel ROCKSTER NEO

Test Date: Aug. 19, 2024 ~ Jan. 21, 2025

Issued Date: Jun. 6, 2025

Issued By: Hwa-Hsing (Dongguan) Testing Co., Ltd.

Address: No.101, Building N1, Yuyuan 2 Road, Yuyuan Industrial Park, HuangJiang Town, Dongguan City, People's Republic of China

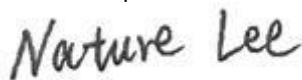
Test Firm Registration No.: 915896

Designation No.: CN1255

Standards: FCC Part 2 (Section 2.1091)
KDB 447498 D01
IEEE C95.1

The above equipment has been tested by **Hwa-Hsing (Dongguan) Testing Co., Ltd.**, and found compliance with the requirement of the above standards. The test record, data evaluation & Equipment Under Test (EUT) configurations represented herein are true and accurate accounts of the measurements of the sample's EMC characteristics under the conditions specified in this report.

Prepared by :



Nature Lee

Reviewed by :

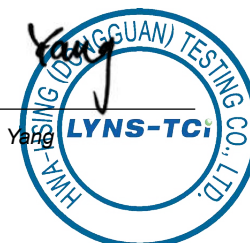


Sye Yang

Approved by :



Scott He



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Lab: [Hwa-Hsing \(Dongguan\) Testing Co., Ltd.](#)Address: [No. 101, Building N1, Yuyuan 2 Road, Yuyuan Industrial Park, HuangJiang Town, Dongguan City, People's Republic of China](#)Tel: [0769-85598986](tel:0769-85598986)Web.: www.lyns-tci.comE-Mail: service-hs@lyns-tci.comRelease
Ver. 1.5

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Release control record

Issue No.	Reason for change	Date issued
2411110503-SE-US-01	Original Release	Jun. 6, 2025

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1 General Information**1.1 General Description of EUT**

Product(s)	ROCKSTER NEO
Test Model(s)	ROCKSTER NEO
Sample No.	HS2411110503002
Series Model(s)	ROCKSTER NEO. Fender X Teufel ROCKSTER NEO
Status of EUT	Engineering Prototype
Power Supply Rating	100-240V~, 50/60Hz, 200W or DC 12.8V from battery
Modulation Type	GFSK, $\pi/4$ DQPSK, 8DPSK
Transfer Rate	1Mbps, 2Mbps, 3Mbps
Operating Frequency	2402 ~ 2480MHz
Number of Channel	79
Max. Output Power	6.05dBm-Peak
Antenna Type and Antenna Gain	FPC Antenna; 3.89dBi Gain
Antenna Connector	N/A
Accessory Device	AC Cable, 1.5m

HW Version	
MAIN PCB:	OA2402-Main-V5
BACK IN&OUT:	OA2402-IN&OUT-V4
BACK CONTROL:	OA2402-VOL-V5
TOP CONTROL:	OA2402-KEY-V4
POWER BOARD:	OA2402-POWER-V4
FW version	
MCU:	ROCKSTER_NEO_TEUFEL_STM32F103_MCU_V0.5.1_20241219
BT:	2835P_Teufel(ROCKSTER NEO)_V1.2.9_20241218

Note:

1. Please refer to the EUT photo document (Reference No.: 2411110503-01&02) for detailed product photo.
2. The above EUT information is declared by manufacturer and for more detailed features description, please refer to the manufacturer's specifications or User's Manual.
3. For the test results, the EUT had been tested with all conditions, and only the worst case was shown in the test report.
4. Model differences: These models are only different from model name, color or appearance for trade purpose

2 RF exposure limit

Limits for maximum permissible exposure (MPE)

Limits for general population / uncontrolled exposure				
Frequency range (MHz)	Electric field strength (V/m)	Magnetic field strength (A/m)	Power density (mW/cm ²)	Average time (minutes)
300-1500	...	...	F/1500	30
1500-100,000	...	...	1.0	30
Note: F = Frequency in MHz				

2.1 MPE calculation formula

$$Pd = (Pout * G) / (4 * \pi * r^2)$$

*Where:*Pd = power density in mW/cm²

Pout = output power to antenna in mW

G = gain of antenna in linear scale

Pi = 3.1416

R = distance between observation point and center of the radiator in cm

Classification:

The antenna of this product, under normal use condition, is at least 20cm away from the body of the user.

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3 Calculation result of maximum conducted power

The antennas provided to the EUT, please refer to the following table:

Function	Frequency (MHz)	Antenna Gain (dBi)	Antenna Type	Transmit and Receive Chain	Maximum Peak Power
BLE	2402-2480	3.89dBi	FPC	1TX,1RX	6.05dBm

Conclusion:

Therefore, the worst-case situation is 0.001962 mW/cm², which is less than “1”. This confirmed that the device compliance with FCC 1.1310 MPE limit.

Appendix – Information on the Testing Laboratories

We, [Hwa-Hsing \(Dongguan\) Testing Co., Ltd.](#), A global provider of TESTING and CERTIFICATION services for consumer products, electronic products and wireless information technology products. Adhering to the core values “HONEST and TRUSTWORTHY, OBJECTIVE and IMPARTIALITY, RIGOROUS and AFFICIENT”, commitment to provide professional, perfect and efficient comprehensive ONE-STOP solution of TESTING and CERTIFICATION services for Manufacturers, Buyers, Traders, Brands, Retailers. Assist client to better manage risk, protect their brands, reduce costs and cut time to over 150 markets in global. Our laboratories are FCC recognized accredited test firms and accredited and approved according to ISO/IEC 17025.

If you have any comments, please feel free to contact us at the following:

Lab Address: [No.101, Building N1, Yuyuan 2 Road, Yuyuan Industrial Park, HuangJiang Town, Dongguan City, People's Republic of China](#)

Contact Tel: [0769-83078199](#)

Email: Customerservice.dg@hwa-hsing.com

Web Site: www.hwa-hsing.com

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