



Test Report No.: FM2010WDG0101

RF EXPOSURE REPORT

Applicant	DEI Sales Inc., dba Polk Audio
Address	5541 Fermi Court Carlsbad CA 92008 United States Of America

Manufacturer or Supplier	DEI Sales Inc., dba Polk Audio
Address	5541 Fermi Court Carlsbad CA 92008 United States Of America
Product	Wireless Subwoofer
Brand Name	Polk
Model	REACT SUB
Additional Model & Model Difference	N/A
Date of tests	Oct. 17, 2020 ~ Nov. 27, 2020

- ☒ FCC Part 2 (Section 2.1091)
☒ KDB 447498 D01
☒ IEEE C95.1

CONCLUSION: The submitted sample was found to COMPLY with the test requirement

Tested by Lucas Chen Project Engineer / EMC Department	Approved by Glyn He Assistant Manager / EMC Department
	

Date: Dec. 08, 2020

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TABLE OF CONTENTS

RELEASE CONTROL RECORD	3
1. CERTIFICATION.....	4
2. RF EXPOSURE LIMIT	5
3. MPE CALCULATION FORMULA.....	5
4. CLASSIFICATION	5
5. ANTENNA GAIN	6
6. CALCULATION RESULT OF MAXIMUM CONDUCTED POWER.....	6



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RELEASE CONTROL RECORD

ISSUE NO.	REASON FOR CHANGE	DATE ISSUED
FM2010WDG0101	Original release	Dec. 08, 2020



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1. CERTIFICATION

PRODUCT: Wireless Subwoofer

BRAND NAME: Polk

MODEL NO.: REACT SUB

ADDITIONAL MODEL: N/A

FCC ID: WLQREACTSUB

TEST SAMPLE: ENGINEERING SAMPLE

APPLICANT: DEI Sales Inc., dba Polk Audio

TESTED DATES: Oct. 17, 2020 ~ Nov. 27, 2020

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

2. RF EXPOSURE LIMIT

LIMITS FOR MAXIMUM PERMISSIBLE EXPOSURE (MPE)

FREQUENCY RANGE (MHz)	ELECTRIC FIELD STRENGTH (V/m)	MAGNETIC FIELD STRENGTH (A/m)	POWER DENSITY (mW/cm ²)	AVERAGE TIME (minutes)
LIMITS FOR GENERAL POPULATION / UNCONTROLLED EXPOSURE				
300-1500	...	...	F/1500	30
1500-100,000	...	...	1.0	30

F = Frequency in MHz

3. MPE CALCULATION FORMULA

$$P_d = (P_{out} \cdot G) / (4 \cdot \pi \cdot r^2)$$

where

P_d = power density in mW/cm²

P_{out} = output power to antenna in mW

G = gain of antenna in linear scale

π = 3.1416

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

4. CLASSIFICATION

The antenna of this product, under normal use condition, is at least 20cm away from the body of the user. So, this device is classified as **Mobile Device**.

5. ANTENNA GAIN

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

Frequency Band	Antenna Gain (dBi)	Antenna Type
5.1GHz + 5.8GHz Wireless	2	PCB Antenna

6. CALCULATION RESULT OF MAXIMUM CONDUCTED POWER

The tuned conducted Average Power (declared by client)

Frequency Band	Target Power (dBm)	Tolerance (dBm)	Lower Tolerance (dBm)	Upper Tolerance (dBm)
5160~5240MHz	10	+/-2	8	12
5735~5840MHz	7	+/-2	5	9

The measured conducted Average Power

Frequency Band	Frequency (MHz)	Averaged Power (dBm)
5160~5240MHz	5240	10.66
5735~5840MHz	5735	7.55

FREQUENCY BAND (MHz)	MAX AVERAGE POWER (dBm)	ANTENNA GAIN (dBi)	DISTANCE (cm)	POWER DENSITY (mW/cm ²)	LIMIT (mW/cm ²)
5.1GHz + 5.8GHz Wireless	12	2	20	0.004997	1.0

--- END ---