

RF EXPOSURE REPORT

Applicant	Zound Industries International AB
Address	Centralplan 15 SE-111 20 Stockholm Sweden

Manufacturer or Supplier	Zound Industries International AB
Address	Centralplan 15 SE-111 20 Stockholm Sweden
Product	PORTABLE STEREO LOUDSPEAKER
Brand Name	Marshall
Model	KILBURN II BLUETOOTH
Additional Model & Model Difference	N/A
Date of tests	May 30, 2019 ~ Jul. 03, 2019

Andy

- **⊠ KDB 447498 D01**
- **☐** IEEE C95.1

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

Tested by Andy Zhu Project Engineer / EMC Department	Approved by Glyn He Supervisor/ EMC Department

Date: Aug. 05, 2019

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RELEASE CONTROL RECORD

ISSUE NO.	REASON FOR CHANGE	DATE ISSUED
FM190530N023	Original release	Aug. 05, 2019

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1. CERTIFICATION

FCC ID:	2AAGF-KILBURNIIBT			
PRODUCT:	PORTABLE STEREO LOUDSPEAKER			
BRAND NAME:	Marshall			
MODEL NO.:	KILBURN II BLUETOOTH			
ADDITIONAL NO.:	N/A			
APPLICANT:	Zound Industries International AB			
STANDARDS:	FCC Part 2 (Section 2.1091)			
	KDB 447498 D01			
	IEEE C95.1			

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2. RF EXPOSURE LIMIT

LIMITS FOR MAXIMUM PERMISSIBLE EXPOSURE (MPE)

FREQUENCY RANGE (MHz)				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

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

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

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**.

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5. ANTENNA GAIN

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

Transmitter Circuit	Peak Gain (dBi)	Antenna Type
Chain 0	4.5	PCB Antenna

6. CALCULATION RESULT OF MAXIMUM CONDUCTED AV POWER

The tuned conducted Average Power (declared by client)

Mode	Frequency	Target	Tolerance	Lower	Upper
	(MHz)	Power (dBm)	(dBm)	Tolerance (dBm)	Tolerance (dBm)
GFSK	2402-2480	2	+-1	1	3
8DPSK	2402-2480	-1	+-1	-2	0

The measured conducted Average Power

Mode	Frequency (MHz)	Averaged Power (dBm)
GFSK	2441	2.09
8DPSK	2480	-0.97

FREQUENCY BAND (MHz)	MAX AVERAGE POWER (dBm)	ANTENNA GAIN (dBi)	DISTANCE (cm)	POWER DENSITY (mW/cm²)	LIMIT (mW/cm²)
2402-2480	3	4.5	20	0.001119	1.0

--- END ---

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