



Jabra END080W Antenna report

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Date: 2023-09-19
Part No.: 50-09054
Manufacturer: GN Audio A/S

Revision History:

| Revision | Date | Change by | Description |
|----------|------------|------------|----------------|
| 1 | 2023.09.19 | Luisa Gong | First Revision |
| | | | |
| | | | |

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1 Introduction

This document describes the radiation performance measurements made on a Jabra Wukong-C. The measurement results provided in this report are: the total radiated power at three frequencies and the antenna radiation patterns at three frequencies in free space (the measurement contains computer, the dongle need to be connected to computer to power on).

The measurements have been performed by:

Luisa Gong

RF Engineer

GN Audio A/S

2 Specification

2.1 Electrical Properties

| | |
|------------------|---------------------|
| Frequency Range: | 2.402GHz ~2.480GHz |
| Impedance: | 50 Ω nominal |
| Radiation: | omni-directional |

2.2 Physical Properties

Type: Stamp antenna

Operating temp: -20 ~ +60 °C

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3 Anechoic Chamber



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4 Results

4.1 Conducted power

Results:

a conducted output power of 10dBm on each channel.

4.2 Total radiated power

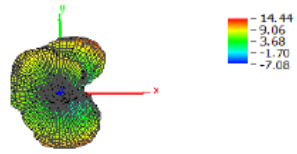
| | | | |
|-------------------------------------------------|-----------|-----------|-----------|
| Channel | 0 | 39 | 78 |
| Frequency[MHz] | 2402 | 2441 | 2480 |
| Peak Equivalent isotropic radiated power (EIRP) | 14.44 dBm | 13.69 dBm | 13.32 dBm |
| Total radiated power | 7.29 dBm | 6.73 dBm | 6.24 dBm |

4.3 Antenna patterns

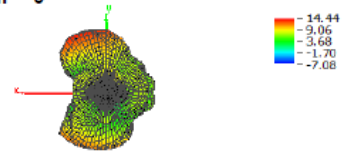
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2.402 GHz

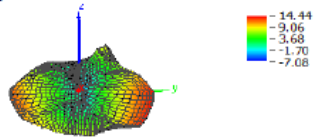
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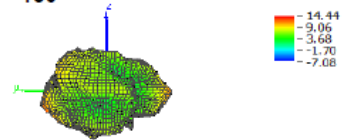
Theta = 180, Phi = 0



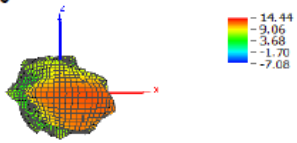
Theta = 90, Phi = 0



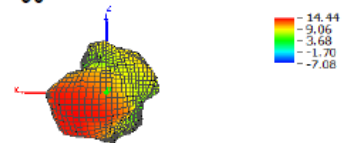
Theta = 90, Phi = 180



Theta = 90, Phi = 270



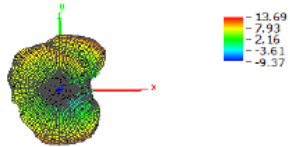
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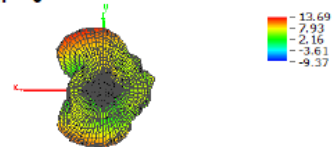
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2.441GHZ

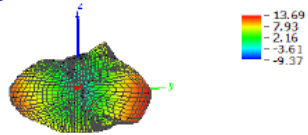
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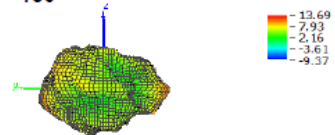
Theta = 180, Phi = 0



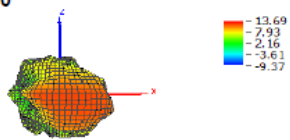
Theta = 90, Phi = 0



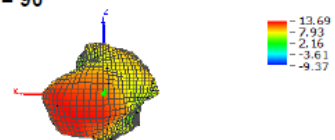
Theta = 90, Phi = 180



Theta = 90, Phi = 270



Theta = 90, Phi = 90

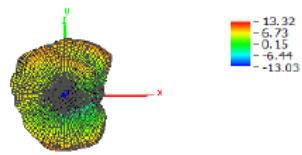


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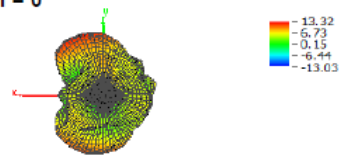
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2.480GHZ

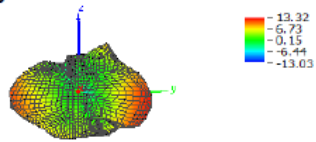
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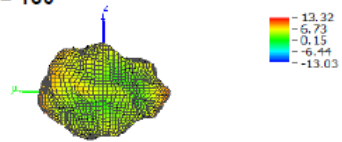
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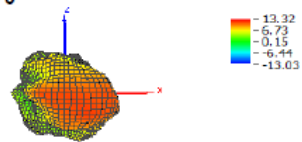
Theta = 90, Phi = 0



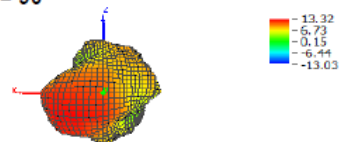
Theta = 90, Phi = 180



Theta = 90, Phi = 270



Theta = 90, Phi = 90



5 Conclusion

The total radiated power from the Jabra Wukong-C varies from 6.24 dBm to 7.29 dBm in free space depending on the frequency. The conducted power is 10 dBm. These figures yield an antenna gain(peak) in the range of 3.32 dBi and 4.44 dBi.

| | 2402 MHz | 2440 MHz | 2480 MHz |
|-------------------------------------------------|-----------|-----------|-----------|
| Conducted power | 10 dBm | 10 dBm | 10 dBm |
| Peak Equivalent isotropic radiated power (EIRP) | 14.44 dBm | 13.69 dBm | 13.32 dBm |

| | 2402 MHz | 2440 MHz | 2480 MHz |
|---------------------|----------|----------|----------|
| Antenna gain (Peak) | 4.44 dBi | 3.69 dBi | 3.32 dBi |

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