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|  <b>BRANCHPOINT<br/>TECHNOLOGIES</b> | Title:<br><b>AURA ICP Sensor SAR Test Exclusion<br/>Justification</b> | DOC #:<br><b>N/A</b> | DCR #:<br><b>N/A</b> | Rev:<br><b>A</b> |
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## 1 Introduction

### 1.1 Purpose

This document reports the evaluation of the AURA ICP Sensor according to FCC-recommended SAR procedures.

### 1.2 Scope

This document only pertains to measurements and analysis of the AURA ICP Sensor 2.4GHz intentional radiator.

### 1.3 Definitions, Acronyms, and Abbreviations

- SAR            Specific Absorption Rate
- RF            Radio Frequency
- RFE          Radio Frequency Exposure
- ICP           Intracranial Pressure

### 1.4 References

- FCC KDB 447498

## 2 Background

The AURA Intracranial Monitoring system is a medical device system composed of five (5) primary components:

- AURA ICP Sensor
- AURA Antenna (wireless power transmission device)
- AURA Monitor Handheld
- AURA Data Receiver
- Battery Charger

The AURA ICP Sensor is a short-term implantable medical device, which is inserted beneath the scalp of a patient, with a non-electronic sensing portion extending beyond the skull into the cranium. The AURA ICP Sensor's metal housing will sit between the patient's skull and scalp. The AURA ICP Sensor data using the Bluetooth Low Energy protocol to the accessory devices,

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using a data antenna encapsulated in a plastic shell outside the metal housing of the implantable device.

### 3 SAR Evaluation and Results

The AURA ICP Sensor is excluded from SAR measurements or numerical analysis thereof.

By design, the AURA ICP Sensor uses the DA14580 BLE SoC from Dialog Semiconductors, which has a maximum transmit power of 1mW (0dBm).

To demonstrate this limit, maximum transmitted power was measured and determined to be under the 1mW (0dBm) exemption limit set forth by FCC KDB 447498. This data may be found in the FCC Part 15 test report issued by Intertek.