# **DAMERELL CONSULTING**

#### **SAR Detail**

The Conneq2 product is an industrial asset tag which for the absence of doubt is affixed permanently to an industrial asset, it is not a personnel tag and will not be worn.

The definition of industrial asset is not limited by this description but generally includes plant equipment, telecommunication cable drums generators etc.

The Conneq2 tag transmits using the 3 BLE advertising channels 37, 38, 39 the maximum allowed power governed by the transmitter is 10mW.

On the basis that this is not a worn product the separation of 50 mm is used as per 4.3.1A of "RF EXPOSURE PROCEDURES AND EQUIPMENT AUTHORIZATION POLICIES FOR MOBILE AND PORTABLE DEVICES"

The SAR limits as per 4.3.1 A are as follows:-

$$1-g SAR < 3$$
,  $10-g SAR < 7.5$ 

The SAR calculations per channel are shown below :-

### Channel 37 (2.402 GHz)

 $\frac{10\text{mW}}{50\text{mm}}$  \* (V2.402) = 0.3

## Channel 38 (2.426 GHz)

 $\frac{10\text{mW}}{50\text{mm}}$  \* (V2.426) = 0.3

### Channel 39 (2.480 GHz)

10mW \* (V2.480) = 0.3 50mm

These values meet the SAR exclusive thresholds for both 1-g and 10-g.