

Reference No: C2859

Mr L Allison Shot Scope Technologies Ltd ETTC 3rd Floor Alrick Bulding The King's Buildings, The University of Edinburgh Edinburgh EH9 3JL UK

York EMC Services Ltd Three Lane Ends Business Centre Methley Road Castleford West Yorkshire WF10 1PN Tel: 01977 731173

Date: 28th September 2016

Dear Mr Allison,

This report contains calculation of SAR test exclusion threshold for the following product:

Bluetooth Module FCCID 2AHWR-SS02

(installed within Shot Scope wristband FCCID 2AHWR-SS01)

The calculation is according to the FCC Knowledge Database (KDB) document KDB 447498 D01 General RF Exposure Guidance V06.

Section 4.3.1 General SAR Test Exclusion Bands was applied. Section 4.3.1 a) for 100MHz to 6GHz and test separation distances ≤50mm was specifically applied. According to this section the SAR test exclusion thresholds are determined by the following:

Threshold =
$$\left[\frac{P(mW)}{d(mm)}\right] \cdot \sqrt{f(GHz)}$$

Where

P is the maximum power of the channel including tune-up tolerance in mW

d is the minimum test separation distance in mm

f is the RF channel frequency in GHz

The minimum test separation distance was considered t be 1mm in consultation with Section 4.2.2 *Bodyworn accessory exposure conditions.*

A BIS designated Notified Body No 1892 Consultancy



York EMC Services Ltd Market Square UNIVERSITY of York Heslington York YO10 5DD UK T: +44 (0)1904 324440 F: +44 (0)1904 324434 E: enquiry@yorkemc.co.uk

www.yorkemc.co.uk

Registered in England and Wales Company Reg No. 6048589 VAT Reg No. 647 2055 41

SAR Exclusion Calculation for Shot Scope Technologies Ltd

This evaluation of the threshold is compared to the threshold limit.

- a. Limit for 1-g head or body worn devices: threshold limit ≤3
- b. Limit for 10-g extremity worn devices: threshold limit \leq 7.5

Since the device is wrist worn the limit b applies. KDB publication447498 Section 4.3.1 a) states that When the minimum test separation is <5mm a separation distance of 5mm is applied.

For this apparatus, the calculated threshold was evaluated using a distance of 5mm, and the results are tabulated in the table below.

power (mW)	Dist (mm)	freq (GHz)	Calculated Threshold	Threshold Limit
2	5	2.402	0.6	7.5
2	5	2.48	0.6	7.5

Table 1 Calculation of threshold

Notes:

Power and distance were rounded to the nearest mW and mm before calculation,

Conclusion

For the required 5mm distances the apparatus met the exclusion requirements for SAR testing.

Yours sincerely

Mchel

Mark Render Senior Engineer York EMC Services Ltd