











# **SAR Exemption Evaluation Report**

Product Name: ONCOACH 900 HR

Model No. : 8485274, 8485275, 8485829

FCC ID : 2AH2POC500HR18

Applicant: DECATHLON USA LLC

Address : 2415 Third Street, Ste 231, San

Francisco, 94107,USA

Date of Receipt: Jun. 05, 2018

Test Date Jun. 07, 2018~ Aug. 07, 2018

Issued Date : Sep. 17, 2018

Report No. : 1862031R-RF-US-P20V02

Report Version: V1.1

The test results relate only to the samples tested.

The test results shown in the test report are traceable to the national/international standard through the calibration of the equipment and evaluated measurement uncertainty herein.

This report must not be used to claim product endorsement by CNAS, TAF any agency of the government.

The test report shall not be reproduced without the written approval of DEKRA Testing & Certification (Suzhou)

Co., Ltd.



## **Test Report Certification**

Issued Date: Sep. 17, 2018

Report No.: 1862031R-RF-US-P20V02



Product Name : ONCOACH 900 HR
Applicant : DECATHLON USA LLC

Address : 2415 Third Street, Ste 231, San Francisco, 94107, USA

Manufacturer : DECATHLON SA

Address : 4 Boulevard de Mons , VILLENEUVE D'ASCQ , 59650 ,

**FRANCE** 

Model No. : 8485274, 8485275, 8485829

FCC ID : 2AH2POC500HR18

EUT Voltage : DC 5V

Applicable Standard : KDB 447498 D01v06

Test Result : Complied

Performed Location : DEKRA Testing & Certification (Suzhou) Co., Ltd.

No.99 Hongye Rd., Suzhou Industrial Park, Suzhou,

215006, Jiangsu, China

TEL: +86-512-6251-5088 / FAX: +86-512-6251-5098

FCC Registration Number: 800392;

Documented By	:	Kathy La
		( Adm. Specialist: Kitty Li )
Reviewed By	:	Frankhe
		(Senior Project Manager: Frank He)
Approved By	:	Jouk zhang
		(Engineering Supervisor: Jack Zhang)



#### 1. RF Exposure Evaluation

#### 1.1. Limits

#### According to KDB 447498 D01 General RF Exposure Guidance v06

#### 4.3.1 Standalone SAR test exclusion considerations

1) The 1-g and 10-g SAR test exclusion thresholds for 100 MHz to 6 GHz at test separation distances ≤ 50 mm are determined by:

[(max. power of channel, including tune-up tolerance, mW)/(min. test separation distance, mm)]  $\cdot$  [ f(GHz)]  $\leq$  3.0 for 1-g SAR and  $\leq$  7.5 for 10-g extremity SAR,where

f(GHz) is the RF channel transmit frequency in GHz

Power and distance are rounded to the nearest mW and mm before calculation

The result is rounded to one decimal place for comparison

3.0 and 7.5 are referred to as the numeric thresholds in the step 2 below

The test exclusions are applicable only when the minimum test separation distance is  $\leq$  50 mm and for transmission frequencies between 100 MHz and 6 GHz. When the minimum test separation distance is  $\leq$  5 mm, a distance of 5 mm according to 5) in section 4.1 is applied to determine SAR test exclusion.

- 2) At 100 MHz to 6 GHz and for test separation distances > 50 mm, the SAR test exclusion threshold is determined according to the following, and as illustrated in Appendix B:
- a) [Power allowed at numeric threshold for 50 mm in step 1) + (test separation distance 50 mm)·( f(MHz)/150)] mW, at 100 MHz to 1500 MHz
- b) [Power allowed at numeric threshold for 50 mm in step 1) + (test separation distance 50 mm)·10] mW at > 1500 MHz and  $\leq$  6 GHz
- 3) The 1-g and 10-g SAR test exclusion thresholds for below 100 MHz at test separation distances ≤ 50 mm are determined by:
- a) The power threshold at the corresponding test separation distance at 100 MHz in step 2) is multiplied by [1 + log(100/f(MHz))] for test separation distances > 50 mm and < 200 mm
- b) The power threshold determined by the equation in a) for 50 mm and 100 MHz is multiplied by  $\frac{1}{2}$  for test separation distances  $\leq$  50 mm
- c) SAR measurement procedures are not established below 100 MHz. When SAR test exclusion cannot be applied, a KDB inquiry is required to determine SAR evaluation requirements for any test results to be acceptable. Note: when the minimum test separation distance is < 5 mm, a distance of 5 mm is applied to determine SAR test exclusion.



#### 1.2. Test Procedure

Software provided by client enabled the EUT to transmit and receive data at lowest, middle and highest channel individually.

The temperature and related humidity: 18 and 78% RH.

### 1.3. Test Result of RF Exposure Evaluation

Product	:	ONCOACH 900 HR
Test Item	:	RF Exposure Evaluation
Test Site	:	AC-6

#### Antenna Gain:

Model No.	N/A						
Antenna manufacturer	N/A						
Antenna Delivery		1*TX+1*RX					
Antenna technology	$\boxtimes$	SISO					
		MIMO		Basic			
				CDD			
				Sectorized			
				Beam-forming			
Antenna Type		External		Dipole			
				Sectorized			
	$\boxtimes$	Internal		PIFA			
			$\boxtimes$	PCB			
				Ceramic Chip Antenna			
				Dipole Antenna			
Antenna Technology	Ant Gain						
	(dBi)						
⊠siso	1.2						

Based on The 1-g and 10-g SAR test exclusion thresholds for 100 MHz to 6 GHz at test separation distances ≤ 50 mm and the formula below:

Estimated SAR=
$$\sqrt{f(GHz)} * \frac{\text{(Max Power of channel, mW)}}{\text{Min. Separation Distance, mm}}$$



Conclusion: 2.4GHz SAR was not required.



F	Exposure Condition	Pmax	Pmax	Distance	f(GHz)	calculation	Stand-alone Test	
Band			(mw)	(mm)		result	exclusion threshold	SAR Test
ВТ	Body	-1.98	0.63	5	2.44	0.20	3.00	No

———— The End	