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SAR EXCLUSION DOCUMENT

Document 75950067-12 Issue 01

2400 – 2480 MHz Transmitter

FCC Standalone SAR Test Exclusion Considerations (KDB 447498 D01) Section 4.3.1 a)

100 MHz – 6 GHz – Separation Distance ≤50 mm

The 1g SAR Test exclusion thresholds for 100 MHz to 6 GHz test separation distances ≤ 50 mm are determined by:

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

- 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
- When the minimum test separation distance is < 5 mm, a distance of 5 mm is applied.

SAR Exclusion Result:)

Frequency (GHz)	Power Output mW	Duty Cycle %	Maximum Power (Tune up Value) * (mW)	Test Separation Distance (mm)	SAR Test Exclusion Threshold	Limit**	SAR Test Exclusion (Yes/No)
2.40	3	1	0.03	5	0.9	3.0	Yes
2.48	3	1	0.03	5	0.9	3.0	Yes

* Maximum power including tolerance of the time averaged declared conducted output power of the device.
** Select ≤ 3.0 for 1g SAR and ≤ 7.5 for 10g extremity SAR.

The SAR exclusion threshold has been evaluated using the formula described above from information supplied by the manufacturer below. Based on the calculation above, the EUT is categorically excluded from SAR testing.

Approved by ..... **Date** 15 April 2021

Ryan Henley
Authorised Signatory

Manufacturer's Declaration of Product information:

Equipment Description

Technical Description: *(Please provide a brief description of the intended use of the equipment)*	The iCWS is a pet drinking station designed to provide the user with a measurement of how much their pet is drinking. The unit includes load cells to weight the water as it is drunk and an RFID antenna to identify the animal drinking. The units also includes a 2.4 GHz link (802.15.4) for communication to the user App via a Sure Petcare Hub.
Manufacturer:	SureFlap Ltd.
Model:	iCWS
Part Number:	iCWSWT

If more than one frequency band is supported, please confirm which combinations of bands are capable of Simultaneous Transmit.	

Frequency Band 1: RFiD 126 kHz

Antenna Model:		
Antenna length:		cm
Bottom frequency:	0.126	MHz
Middle frequency:		MHz
Top frequency:	0.126	MHz

Maximum power (input to the antenna including a tolerance):		W
Antenna gain (or maximum gain allowed):		dBi

Or

Field Strength Measurement:	64.34	dBuA/M
Measurement Distance:	3	m

Separation distance from antenna to the user/bystander	20	cm
Transmitter Duty Cycle:	1	%

Frequency Band 2: RFiD 133kHz

Antenna Model:		
Antenna length:		cm
Bottom frequency:	0.133	MHz
Middle frequency:		MHz
Top frequency:	0.133	MHz

Maximum power (input to the antenna including a tolerance):		W
Antenna gain (or maximum gain allowed):		dBi

Or

Field Strength Measurement:	63.47	dBuA/M
Measurement Distance:	3	m

Separation distance from antenna to the user/bystander	20	cm

Transmitter Duty Cycle:	1	%

Frequency Band 3: 2.4 GHz 802.15.4

Antenna Model:		
Antenna length:		cm
Bottom frequency:	2400	MHz
Middle frequency:		MHz
Top frequency:	2480	MHz

Maximum power (input to the antenna including a tolerance):		W
Antenna gain (or maximum gain allowed):	3.00	dBi

Or

Field Strength Measurement:		dBµA/M
Measurement Distance:		cm

Separation distance from antenna to the user/bystander	20	cm
Transmitter Duty Cycle:	1	%

I hereby declare that the information supplied is correct and complete.

Name: Dr David Hallas
Position held: Managing Director
Date: 05-01-2021