

Report No. : EED32081145302





RF Exposure Evaluation Report

Product	:	Radar R	
Trade mark	:	Rentokil	
Model/Type reference	:	5000006S	
Serial Number	:	N/A	
Report Number	:	EED32O81145302	
FCC ID	:	2AK3P-5000006S	
Date of Issue Test Standards	:	Feb. 09, 2023 47 CFR Part 1.1307 47 CFR Part 1.1310 447498 D04 Interim General RF Exposure Guidance v01	

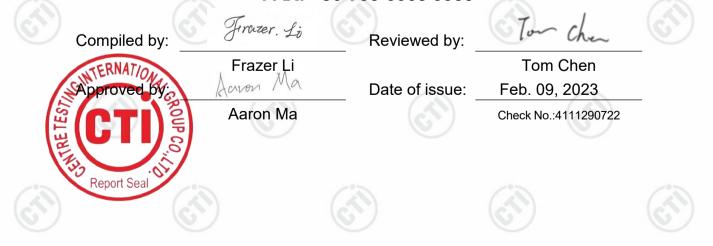
Test result

PASS

Prepared for: **Rentokil Initial 1927 plc Compass House, Manor Royal, Crawley, West** Sussex, RH10 9PY, United Kingdom

Prepared by:

Centre Testing International Group Co., Ltd. Hongwei Industrial Zone, Bao'an 70 District, Shenzhen, Guangdong, China TEL: +86-755-3368 3668 FAX: +86-755-3368 3385









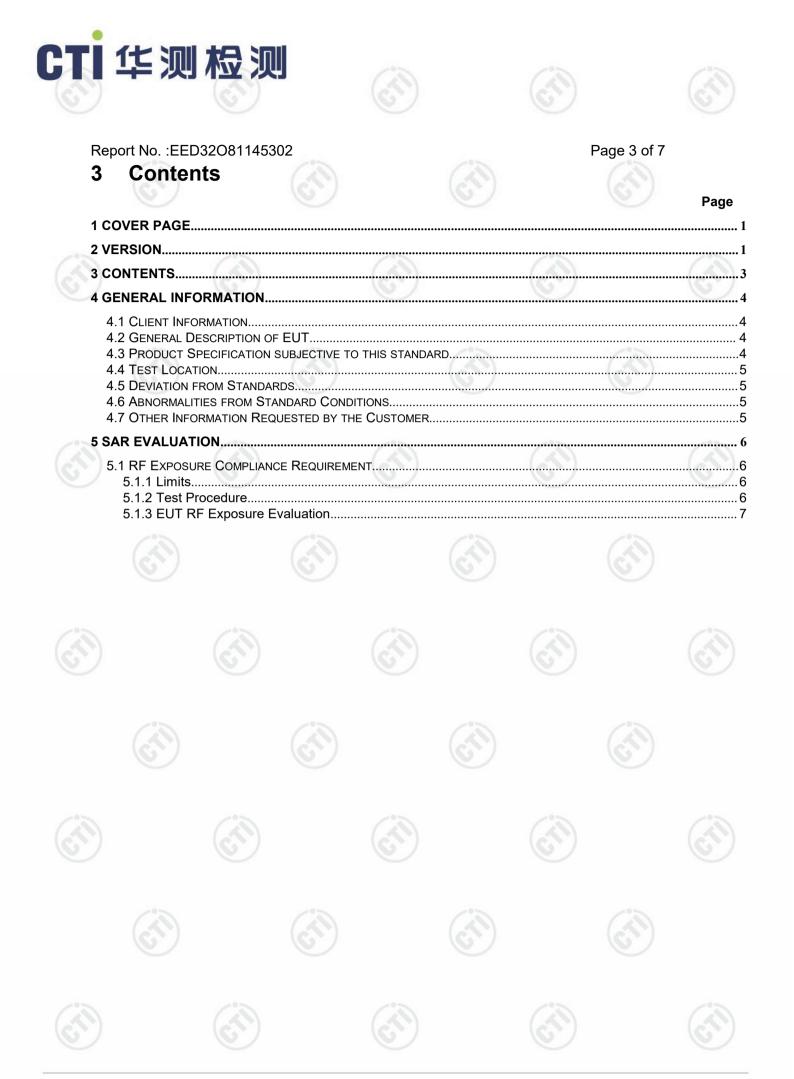
 Report No. :EED32081145302
 Page 2 of 7

 2 Version Date
 Description

 00
 Feb. 09, 2023
 Original



Hotline:400-6788-333 www.cti-cert.com E-mail:info@cti-cert.com Complaint call:0755-33681700 Complaint E-mail:complaint@cti-cert.com









Page 4 of 7

Report No. :EED32O81145302

4 General Information

4.1 Client Information

Applicant:	Rentokil Initial 1927 plc
Address of Applicant:	Compass House, Manor Royal, Crawley, West Sussex, RH10 9PY, United Kingdom
Manufacturer:	Rentokil Initial 1927 plc
Address of Manufacturer:	Compass House, Manor Royal, Crawley, West Sussex, RH10 9PY, United Kingdom
Factory:	UK Circuits and Electronics Solutions Ltd
Address of Factory:	Greengate Industrial Estate, Greenside Way, Middleton, Manchester, M24 1SW, United Kingdom

4.2 General Description of EUT

Product Name:	13	Radar R			
Model No. (EUT):	6	5000006S	(\mathcal{C})	(5)	(3)
Add Model No.:	\bigcirc	N/A	\bigcirc	\bigcirc	
Trade Mark:		Rentokil			

4.3 Product Specification subjective to this standard

Operation Frequency:	915.25MHz~927.50MHz		I A A A A A A A A A A A A A A A A A A A	
Modulation Technique:	Frequency Hopping Spread Sp	ectrum(FHSS)		
Modulation Type:	LoRa Chirp Spread Spectrum			
Product Type:	Fix Location		1	
Test Power Grade:	Default	(°)	/	$\langle \mathcal{O} \rangle$
Test Software of EUT:	Putty.exe			
Antenna Type:	Internal antenna			
Antenna Gain:	5.48dBi			
Power Supply:	Battery: DC 6.0V	$(c^{(n)})$	(S)	
Test Voltage:	DC 6.0V	U		
Sample Received Date:	Sep. 01, 2022			
Sample tested Date:	Jan. 11, 2023 to Feb.03, 2023			(i)
Remark:		6)	(\mathcal{O})
Communication Norman and Astala	and the second and Demand the second second	· (·) · · · · · · · · · · · · · · · · ·	/= 1 ! = = / =	a sea a shall a sal

Company Name and Address shown on Report, the sample(s) and sample Information was/ were provided by the applicant who should be responsible for the authenticity which CTI hasn't verified.







All tests were performed at:

Page 5 of 7

4.4 Test Location



Centre Testing International Group Co., Ltd Building C, Hongwei Industrial Park Block 70, Bao'an District, Shenzhen, China Telephone: +86 (0) 755 33683668 Fax:+86 (0) 755 33683385 No tests were sub-contracted. FCC Designation No.: CN1164

4.5 Deviation from Standards

None.

4.6 Abnormalities from Standard Conditions

None.

4.7 Other Information Requested by the Customer

None.









5 SAR Evaluation

5.1 RF Exposure Compliance Requirement

5.1.1 Limits

The SAR-based exemption formula of § 1.1307(b)(3)(i)(B), repeated here as Formula (B.2), applies for single fixed, mobile, and portable RF sources with available maximum time-averaged power or effective radiated power (ERP), whichever is greater, of less than or equal to the threshold Pth (mW).

This method shall only be used at separation distances from 0.5 cm to 40 cm and at frequencies from 0.3 GHz to 6 GHz (inclusive). Pth is given by Formula

$$P_{\rm th} \,({\rm mW}) = \begin{cases} ERP_{20 \,\,{\rm cm}} (d/20 \,\,{\rm cm})^x & d \le 20 \,\,{\rm cm} \\ \\ ERP_{20 \,\,{\rm cm}} & 20 \,\,{\rm cm} < d \le 40 \,\,{\rm cm} \end{cases}$$

where

$$x = -\log_{10}\left(\frac{60}{ERP_{20}\,\mathrm{cm}\sqrt{f}}\right)$$

and f is in GHz, d is the separation distance (cm), and ERP20cm is per Formula (B.1).

$$P_{\text{th}} (\text{mW}) = ERP_{20 \text{ cm}} (\text{mW}) = \begin{cases} 2040f & 0.3 \text{ GHz} \le f < 1.5 \text{ GHz} \\ \\ 3060 & 1.5 \text{ GHz} \le f \le 6 \text{ GHz} \end{cases}$$
(B.1)

The 1 mW Blanket Exemption of § 1.1307(b)(3)(i)(A) applies for single fixed, mobile, and portable RF sources with available maximum time-averaged power of no more than 1 mW, regardless of separation distance.

5.1.2 Test Procedure

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









Report No. :EED32O81145302

Page 7 of 7

5.1.3 EUT RF Exposure Evaluation

For Lora:

Frequency (MHz)	Separation distance(c m)	Max. Conducted Output power (dBm)	Antenna Gain (dBi)	ERP (dBm)	ERP (mW)	Limit (mW)	Result
915.25	20	16.04	5.48	21.52	141.906	1867.1100	PASS

Note:

①ERP (dBm)=Max. Conducted Output power (dBm)+Antenna Gain (dBi);

②The test data please refer to the report of EED32O81365001, and only the worst case data was recorded in this report.

The test report is effective only with both signature and specialized stamp, The result(s) shown in this report refer only to the sample(s) tested. Without written approval of CTI, this report can't be reproduced except in full.

