



RF Exposure Evaluation Declaration

FCC ID : WIYS1F4BBT001
Applicant : CASTLES TECHNOLOGY CO., LTD.
Product : POS Cradle
Model No. : S1F4B-BT
Trademark : 
FCC Rule Part(s) : FCC Part 2.1093
Received Date : February 2, 2026

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Approved By : Chenz Ker
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The test results relate only to the samples tested.

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

The test report shall not be reproduced except in full without the written approval of MRT Technology (Taiwan) Co., Ltd.

Revision History

Report No.	Version	Description	Issue Date	Note
2602TW8701-U4	1.0	Original Report	2026-03-26	

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General Information

Applicant	CASTLES TECHNOLOGY CO., LTD.
Applicant Address	6F, NO. 207-5, SEC. 3, BEIXIN RD., XINDIAN DISTRICT, NEW TAIPEI CITY 231030, TAIWAN (R. O. C.)
Manufacturer	CASTLES TECHNOLOGY CO., LTD.
Manufacturer Address	6F, NO. 207-5, SEC. 3, BEIXIN RD., XINDIAN DISTRICT, NEW TAIPEI CITY 231030, TAIWAN (R. O. C.)
Test Site	MRT Technology (Taiwan) Co., Ltd
Test Site Address	No. 38, Fuxing Second Rd., Guishan Dist., Taoyuan City 333, Taiwan (R.O.C)
MRT FCC Registration No.	291082
Test Device Serial No.	N/A ☐ Production ☒ Pre-Production ☐ Engineering

Test Facility / Accreditations

1. MRT facility is a FCC registered (Reg. No. 291082) test facility with the site description report on file and is designated by the FCC as an Accredited Test Firm.
2. MRT facility is an IC registered (MRT Reg. No. 21723) test laboratory with the site description on file at Industry Canada.
3. MRT Lab is accredited to ISO 17025 by the Taiwan Accreditation Foundation (TAF Cert. No. 3261) in EMC, Telecommunications and Radio testing for FCC (Designation Number: TW3261), Industry Canada, EU and TELEC Rules.

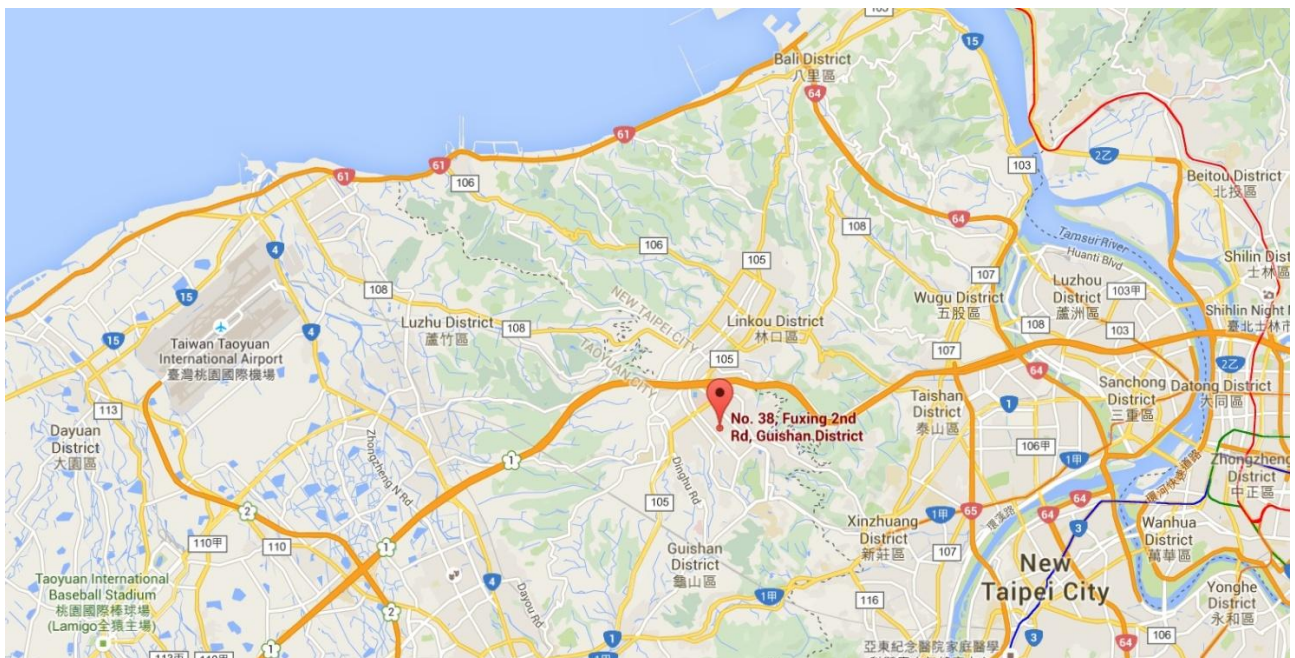
1. INTRODUCTION

1.1. Scope

Measurement and determination of electromagnetic emissions (EMC) of radio frequency devices including intentional and/or unintentional radiators for compliance with the technical rules and regulations of the Federal Communications Commission and the Innovation, Science and Economic Development Canada and Certification and Engineering Bureau.

1.2. MRT Test Location

The map below shows the location of the MRT LABORATORY, its proximity to the Taoyuan City. These measurement tests were conducted at the MRT Technology (Taiwan) Co., Ltd. Facility located at No.38, Fuxing 2nd Rd., Guishan Dist., Taoyuan City 33377, Taiwan (R.O.C).



2. PRODUCT INFORMATION

2.1. Feature of Equipment under Test

Product Name	POS Cradle
Model No.	S1F4B-BT
Supports Radios Spec.	WPAN: Bluetooth Dual Mode
Accessory	
Power Adapter	Brand Name: Shenzhen Aoda Power Technology Co.,Ltd Model: A829-120167C-US1 Input: AC 100-240V~0.5A, 50-60Hz Output: 5V = 3.0A, 15.0W / 9.0V =2.23A 20.07W/ 12.0V =1.67A 20.04W /3.3~5.9V =3.0A 17.7W MAX / 3.3-11.0V =2.2A 20.0W MAX

2.2. Description of Available Antennas

No.	Manufacturer	Part No.	Antenna Type	Peak Gain
1	AWAN	ALF6P-100026	Dipole	2.93dBi

2.3. Device Classification

According to the user manual, this device is classified as a Portable Device. So, the RF exposure evaluation requirements of § 2.1093 for Portable device exposure conditions subject to MPE limits.

2.4. Applied Standards

According to the specifications of the manufacturer, the EUT must comply with the requirements of the following standards:

FCC Part 2.1093 & KDB 447498 D04 Interim General RF Exposure Guidance v01

3. RF Exposure Evaluation

3.1. Limits

According to FCC KDB 447498 D04V01 - SAR-Based Exemption

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). P_{th} is given by Formula .

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

where

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

and f is in GHz, d is the separation distance (cm), and ERP_{20cm} is per Formula.

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

The example values shown as below are for illustration only.

Example Power Thresholds (mW)

Frequency (MHz)	Distance (mm)										
		5	10	15	20	25	30	35	40	45	50
	300	39	65	88	110	129	148	166	184	201	217
	450	22	44	67	89	112	135	158	180	203	226
	835	9	25	44	66	90	116	145	175	207	240
	1900	3	12	26	44	66	92	122	157	195	236
	2450	3	10	22	38	59	83	111	143	179	219
	3600	2	8	18	32	49	71	96	125	158	195
	5800	1	6	14	25	40	58	80	106	136	169

Note: when 10-g extremity SAR applies, SAR test exemption may be considered by applying a factor of 2.5 to the SAR-based exemption thresholds.

3.2. Test Result of RF Exposure Evaluation

Product	POS Cradle
Test Item	RF Exposure Evaluation

Mode	Frequency Band (MHz)	Output Power (dBm)	Output Power (mW)	Antenna Gain (dBi)	EIRP (mW)	FCC Extremity SAR Test Exclusion Threshold (mW)
BT/BLE	2402~2480	5.67	3.69	2.93	7.24	7.5

So, this device can comply the SAR test exclusion.

_____ The End _____