

RF Exposure Evaluation Report

Product Name : Fruit and Vegetable Cleanliness Detector

Model No. : PD100

FCC ID : MSQ-PD100

Applicant : ASUSTeK COMPUTER INC.

Address : 1F., No. 15, Lide Rd., Beitou Dist., Taipei City 112, Taiwan

Date of Receipt : Aug. 11, 2020

Date of Declaration : May 10, 2021

Report No. : 2130834R-E3082100014

Report Version : V1.0



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 report of the equipment and evaluated measurement uncertainty herein.

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

The test report shall not be reproduced without the written approval of DEKRA Testing and Certification Co., Ltd.

Measurement uncertainties evaluated for each testing system and associated connections are given here to provide the system information for reference. Compliance determinations do not take into account measurement uncertainties for each testing system, but are based on the results of the compliance measurement.

Issued Date: May 10, 2021

Report No.: 2130834R-E3082100014



Product Name	Fruit and Vegetable Cleanliness Detector	
Applicant	ASUSTeK COMPUTER INC.	
Address	1F., No. 15, Lide Rd., Beitou Dist., Taipei City 112, Taiwan	
Manufacturer	ASUSTeK COMPUTER INC.	
Model No.	PD100	
FCC ID.	MSQ-PD100	
Trade Name	ASUS	
Applicable Standard	KDB 447498 D01 v06	<input type="checkbox"/> Minimum test separation distance ≥ 20 cm <input checked="" type="checkbox"/> For low power devices
Test Result	Complied	

Documented By :



(Senior Adm. Specialist / Joanne Lin)

Tested By :



(Senior Engineer / Wen Lee)

Approved By :



(Director / Vincent Lin)

Revision History

Report No.	Version	Description	Issued Date
2130834R-E3082100014	V1.0	Initial issue of report.	2021-05-10

1. GENERAL INFORMATION

1.1. EUT Description

Product Name	Fruit and Vegetable Cleanliness Detector
Trade Name	ASUS
Model No.	PD100
FCC ID.	MSQ-PD100
Frequency Range	2402-2480MHz
Channel Number	V5.0: 40CH
Type of Modulation	V5.0: GFSK
Antenna Type	PIFA Antenna
Antenna Gain	Refer to the table "Antenna List"

Antenna List

No.	Manufacturer	Part No.	ASUS No.	Antenna Type	Peak Gain
1	INPAQ	WA-P-LA-02-230	14008-03740000	PIFA Antenna	-0.22dBi for 2.4GHz

2. RF Exposure Evaluation

2.1. Standard Applicable

According to 1.1307 (b)(1), systems operating under the provisions of this section shall be operated in a manner that ensure that the public is not exposed to radio frequency energy level in excess of the Commission's guideline.

2.2. Measurement Result:

According to KDB Publication 447498 D01, section 4.3.1, per the calculations of item 1 ($\text{Power(mW)}/\text{separation (mm)} \cdot \sqrt{f(\text{GHz})} \leq 3.0$), SAR is required as shown in the table below where calculated values are greater than 3.0:

Operation frequency = 2450MHz and antenna separation distance = 5mm

Body SAR Test Exclusion Threshold = 10mW

Frequency Band (MHz)	Maximum peak output power		Body SAR Test Exclusion Threshold	Calculated Threshold Value (≤ 3.0 SAR is not required)
	(dBm)	(mW)	(mW)	
2402	4.53	2.84	10	0.880

Note1: The SAR/MPE measurement is not necessary.

Note2: The maximum peak output power is refer to report No.: 2130834R-E3032110109 from the DEKRA.