RF Exposure Evaluation Report

Product Name : Fruit and Vegetable Cleanliness Detector
Model No. : PD100A
FCC ID : MSQ-PD100A

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

Date of Receipt : Sep. 08, 2021
Date of Declaration : Oct. 20, 2021
Report No. : 2190276R-RFUSMPEV03-A
Report Version : V1.0

Testing Laboratory
3023

Issued Date: Oct. 20, 2021
Report No.: 2190276R-RFUSMPEV03-A

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.	PD100A	
FCC ID.	MSQ-PD100A	
Trade Name	ASUS	
Applicable Standard	KDB 447498 D01 v06	☐ Minimum test separation distance ≥ 20 cm ☒ For low power devices
Test Result	Complied	

Documented By : Joanne Lin

(Senior Project Specialist / Joanne Lin)

Tested By : Bill Lin

(Senior Engineer / Bill Lin)

Approved By : Jack Hsu

(Senior Engineer / Jack Hsu)

Revision History

Report No.	Version	Description	Issued Date
2190276R-RFUSMPEV03-A	V1.0	Initial issue of report.	2021-10-20

1. GENERAL INFORMATION

1.1. EUT Description

Product Name	Fruit and Vegetable Cleanliness Detector
Trade Name	ASUS
Model No.	PD100A
FCC ID.	MSQ-PD100A
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 (Power(mW)/separation (mm)*sqrt(f(GHz)≤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	3.01	2.00	10	0.620

Note1: The SAR/MPE measurement is not necessary.

Note2: The maximum peak output power is refer to report No.: 2190276R-RFUSBLEV01-A from the DEKRA.