# **RF** Exposure Evaluation Report

Product Name	e: LinkCard
Model No.	: IXWW22
FCC ID	: IPH-04150

Applicant : Garmin International, Inc.Address : 1200 E. 151st Street Olathe, KS 66062 United States

Date of Receipt	:	Jun. 17, 2021
Date of Declaration :		Sep. 02, 2021
Report No.	:	2160704R-RFUSMPEV03-A
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: Sep. 02, 2021 Report No.: 2160704R-RFUSMPEV03-A



Product Name	LinkCard			
Applicant	Garmin International, Inc.			
Address	1200 E. 151st Street Olathe, KS 66062 United States			
Manufacturer	Garmin International, Inc.			
Model No.	IXWW22			
FCC ID.	IPH-04150			
Trade Name	GARMIN			
Applicable Standard	KDB 447498 D01 v06 $\Box$ Minimum test separation distance $\geq 20$ cm $\boxtimes$ For low power devices			
Test Result	Complied			

Documented By

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:

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Ida Tung

( Project Specialist / Ida Tung )

Tested By

NEN CE

(Supervisor / Wen Lee)

Approved By

Tim Lung

( Manager / Tim Sung )



## **Revision History**

Report No.	Version	Description	Issued Date
2160704R-RFUSMPEV03-A	V1.0	Initial issue of report.	Sep. 02, 2021



### 1. GENERAL INFORMATION

## **1.1. EUT Description**

Product Name	LinkCard		
Trade Name	GARMIN		
Model No.	IXWW22		
FCC ID.	IPH-04150		
Frequency Range	2402-2480MHz		
Channel Separation	2MHz		
Channel Number	BT: 79, BLE: 40CH		
Type of Modulation	FHSS: GFSK(1Mbps) /π/4DQPSK(2Mbps) / 8DPSK(3Mbps)		
	Bluetooth V4.2: GFSK (1Mbps)		
Antenna Type	Chip Antenna		
Antenna Gain	Refer to the table "Antenna List"		
Contain Module	Cypress / CYW89820		

#### Antenna List

No.	Manufacturer	Part No.	Antenna Type	Peak Gain
1	INPAQ	VGAP-CLA-AS-A1	Chip Antenna	1.46 dBi for 2.4 GHz

#### 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) $\leq$ 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

Frequency Band	Maximum peak output power Peak Gain: 1.46dBi			SAR Test Exclusion Threshold	Calculated Threshold Value $(\leq 3.0 \text{ SAR is not required})$
(MHz)	conducted	EIRP	EIRP	(mW)	
	(dBm)	(dBm)	(mW)		
2441	3.16	4.62	2.90	10	0.905

Body SAR Test Exclusion Threshold = 10 mW

Note1: The SAR/MPE measurement is not necessary.

Note2: The maximum peak output power is refer to report No.: 2160704R-E3032110108,

2160704R-E3032110108-A from the DEKRA.