

## RF Exposure Evaluation Report


**Client:** Garmin International, Inc.

**Address:** 1200 East 151st Street  
Olathe, KS 66062

**Model:** GMN-0620

**Test Report No.:** RFE231201-00-M1A

**Approved By:**



**Fox Lane,**  
EMC Test Engineer

**Date:** August 2, 2024

**Total Pages:** 6

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## Revision Page

Rev. No.	Date	Description
Original	30 July 2024	Issued by FLane Prepared by FLane
A	2 August 2024	Updated Limits to General Exposure – FL

# 1 Regulatory Requirements:

FCC Part 1.1310, 2.1091, 2.1093  
KDB 447498 D01  
RSS-102, Issue 6

## **Summary:**

The purpose of this report is to evaluate the EUT's transmitter for exemption from routine SAR testing.

## **EUT:**

Model:	<b>GMN-0620</b>
FCC ID:	<b>IPH-04371</b>
IC:	

MPE Lab	Nebraska Center for Excellence in Electronics
MPE Labs FCC Cab Designation:	US1060
MPE Labs ISED Cab Designation:	US0177

## 2 FCC

### FCC Limits, Part 1.1310

Frequency range (MHz)	Electric field strength (V/m)	Magnetic field strength (A/m)	Power density (mW/cm <sup>2</sup> )	Averaging time (minutes)
<b>(A) Limits for Occupational/Controlled Exposure</b>				
0.3-3.0	614	1.63	*100	6
3.0-30	1842/f	4.89/f	*900/f <sup>2</sup>	6
30-300	61.4	0.163	1.0	6
300-1,500			f/300	6
1,500-100,000			5	6
<b>(B) Limits for General Population/Uncontrolled Exposure</b>				
0.3-1.34	614	1.63	*100	30
1.34-30	824/f	2.19/f	*180/f <sup>2</sup>	30
30-300	27.5	0.073	0.2	30
300-1,500			f/1500	30
1,500-100,000			1.0	30

Occupational/Controlled	<input type="checkbox"/>
General Population/uncontrolled	<input checked="" type="checkbox"/>

**FCC Power Density Calculations**

Freq.	Conducted Power	Antenna Gain	Peak Power EIRP	Peak Power EIRP +10% for Tolerance	Power Density	Limit at specified distance	% of limit	Result
MHz	mW	numerical	mW	mW	mW/cm <sup>2</sup>	mW/cm <sup>2</sup>	%	
1025.00	692.000	3.24	2239.27	2463.19	0.490	0.68	71.713	PASS
1088.00	711.000	3.24	2300.75	2530.83	0.503	0.73	69.415	PASS
1150.00	722.000	3.24	2336.35	2569.98	0.511	0.77	66.689	PASS

Distance (d)	20	cm
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**$S = (P \times G)/(4 \times \pi \times d^2)$  – used to calculate exposure at "d" cm**

**$EIRP = P \times G$ , measured as field strength**

**$d = \sqrt{(S/(P \times G) \times 4 \times \pi)}$  – used to calculate minimum distance to meet limits**

S = power density (mW/cm<sup>2</sup>)

P = transmitter conducted power (in mW)

G = antenna numeric gain (Numerical)

d = distance to radiation center (cm)

**Results:  
Complies**

Note:

EIRP values in mW were multiplied by 1.1 to account for a 10% tolerance.

## REPORT END