

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:	GMN-0620
FCC ID:	IPH-04371
IC:	

MPE Lab	Nebraska Center for Excellence in Electronics
MPE Labs FCC Cab Designation:	US1060
MPE Labs ISSED 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 ²)	Averaging time (minutes)
(A) Limits for Occupational/Controlled Exposure				
0.3-3.0	614	1.63	*100	6
3.0-30	1842/f	4.89/f	*900/f ²	6
30-300	61.4	0.163	1.0	6
300-1,500			f/300	6
1,500-100,000			5	6
(B) Limits for General Population/Uncontrolled Exposure				
0.3-1.34	614	1.63	*100	30
1.34-30	824/f	2.19/f	*180/f ²	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	☐
General Population/uncontrolled	☒

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 ²	mW/cm ²	%	
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/cm²)

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