

RF Exposure Evaluation Report

Client: Garmin International, Inc.

Address: 1200 E. 151st Street
Olathe, Kansas, 66062, USA

Model: A05004

Test Report No.: R20251104-00-MPE3E

Approved By: 
Fox Lane,
EMC Test Engineer

Date: January 22, 2026

Total Pages: 8

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Revision Page

Rev. No.	Date	Description
Original	9 January 2026	Issued by FLane Prepared by FLane
A	13 January 2026	Updated to +2dB tune up tolerance – FL
B	15 January 2026	Updated table to Target Power Corrected note regarding tolerance – FL
C	16 January 2026	Corrected FCC and IC ID – FL
D	20 January 2026	Corrected FCC/IC ID Added lab description section, added test firm certification number, SW, FVIN, Firmware rev number, added photo from ISED Safety Code 6 – FL
E	20 January 2026	Updated Test Firm registration number – 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:	A05004
FCC ID:	IPH-05004
IC:	1792A-05004
HVIN:	A05004
FVIN:	N/A
Firmware Rev Number:	1.14
SW:	ble_tool_p.exe Version 1.0 (GMSK)

2 Laboratory Description:

All testing was performed at the following Facility:
The Nebraska Center for Excellence in Electronics (NCEE Labs)
4740 Discovery Drive
Lincoln, NE 68521

FCC Accredited Test Site Designation No: US1060
FCC Test Firm Registration No: 134067

Industry Canada Test Site Registration No: 4294A
ISED CAB No: US0177

A2LA Certificate No: 1953.01

3 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.	Target Conducted Average Power	Antenna Gain	EIRP	EIRP +2dB for Tolerance	EIRP +2dB for Tolerance	Power Density	Limit at specified distance	% of limit	Result
MHz	dBm	dB	dBm	dbm	mW	mW/cm ²	mW/cm ²	%	
2402.00	4.500	1.9	6.40	7.04	5.06	0.001	1.00	0.101	PASS
2440.00	4.500	1.9	6.40	7.04	5.06	0.001	1.00	0.101	PASS
2480.00	4.500	1.9	6.40	7.04	5.06	0.001	1.00	0.101	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:

The user's manual will stipulate that a 20cm distance from the user is to be maintained.

EIRP values in dBm were added with a +2 dB to account for tune up tolerance.

4 ISED

2.2.2 Electric Field Strength, Magnetic Field Strength and Power Density (10 MHz–300 GHz)

To ensure compliance with the basic restrictions outlined in Section 2.1, at frequencies between 10 MHz and 300 GHz, the reference levels for electric- and magnetic-field strength and power density must be complied with.

TABLE 5: Reference Levels for Electric Field Strength, Magnetic Field Strength and Power Density in Uncontrolled Environments

Frequency (MHz)	Electric Field Strength (E_{RL}), (V/m, RMS)	Magnetic Field Strength (H_{RL}), (A/m, RMS)	Power Density (S_{RL}), (W/m ²)	Reference Period (minutes)
10–20	27.46	0.0728	2	6
20–48	$58.07 / f^{0.25}$	$0.1540 / f^{0.25}$	$8.944 / f^{0.5}$	6
48–300	22.06	0.05852	1.291	6
300–6000	$3.142 f^{0.3417}$	$0.008335 f^{0.3417}$	$0.02619 f^{0.6834}$	6
6000–15000	61.4	0.163	10	6
15000–150000	61.4	0.163	10	$616000 / f^{1.2}$
150000–300000	$0.158 f^{0.5}$	$4.21 \times 10^{-4} f^{0.5}$	$6.67 \times 10^{-5} f$	$616000 / f^{1.2}$

Frequency, f , is in MHz.

TABLE 6: Reference Levels for Electric Field Strength, Magnetic Field Strength and Power Density in Controlled Environments

Frequency (MHz)	Electric Field Strength (E_{RL}), (V/m, RMS)	Magnetic Field Strength (H_{RL}), (A/m, RMS)	Power Density, (S_{RL}), (W/m ²)	Reference Period (minutes)
10–20	61.4	0.163	10	6
20–48	$129.8 / f^{0.25}$	$0.3444 / f^{0.25}$	$44.72 / f^{0.5}$	6
48–100	49.33	0.1309	6.455	6
100–6000	$15.60 f^{0.25}$	$0.04138 f^{0.25}$	$0.6455 f^{0.5}$	6
6000–15000	137	0.364	50	6
15000–150000	137	0.364	50	$616000 / f^{1.2}$
150000–300000	$0.354 f^{0.5}$	$9.40 \times 10^{-4} f^{0.5}$	$3.33 \times 10^{-4} f$	$616000 / f^{1.2}$

Frequency, f , is in MHz.

NOTES FOR TABLES 5 AND 6:

- For exposures shorter than the reference period, field strengths may exceed the reference levels, provided that the time average of the squared value of the electric or magnetic field strength over any time period equal to the reference period shall not exceed E_{RL}^2 or H_{RL}^2 , respectively. For exposures longer than the reference period, including indefinite exposures, the time average of the squared value of the electric or magnetic field strength over any time period equal to the reference period shall not exceed E_{RL}^2 or H_{RL}^2 , respectively.

Canada Safety Code 6, Section 2.2.2

Occupational/Controlled	☐
General Population/uncontrolled	☒

ISED Power Density Calculations									
Freq.	Target Conducted Average Power	Antenna Gain	EIRP	EIRP +2dB for Tolerance	EIRP +2dB for Tolerance	Power Density	Limit at specified distance	% of limit	Result
MHz	dBm	dB	dBm	dbm	mW	mW/cm ²	mW/cm ²	%	
2402.00	4.50	1.9	6.40	8.40	6.92	0.001	0.54	0.257	PASS
2440.00	4.50	1.9	6.40	8.40	6.92	0.001	0.54	0.254	PASS
2480.00	4.50	1.9	6.40	8.40	6.92	0.001	0.55	0.252	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)

Result:

The EUT was found to be exempt from routine SAR testing and **COMPLIANT** with FCC and ISED RF exposure requirements.

REPORT END