

# RF EXPOSURE REPORT

**FCC ID: IPH-P1160**

Report Reference No. .... : 24EFSS01052 01581

Date of issue ..... : 2024-03-05

Applicant's name..... : Garmin international, Inc.

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

Manufacturer..... : Garmin international, Inc.

Equipment..... : Low Power Data Transceiver

Trade Mark..... : /

Model ..... : A0P1160

Ratings..... : I/P: DC 3V

O/P: /

Testing Laboratory ..... : DongGuan ShuoXin Electronic Technology Co., Ltd.

Address..... : Zone A, 1F, No. 6, XinGang Road YuanGang Street,  
XinAn District, ChangAn Town, DongGuan City,  
GuangDong, China

According ..... : KDB 447498 D04 Interim General RF Exposure Guidance v01

Test Engineer:



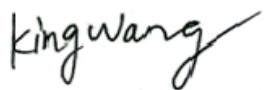
Blue Qiu

Responsible Engineer :



Smile Wang

Authorized Signatory:



King Wang

## MPE CALCULATION METHOD:

$$P_{th} \text{ (mW)} = ERP_{20 \text{ cm}} \text{ (mW)} = \begin{cases} 2040f & 0.3 \text{ GHz} \leq f < 1.5 \text{ GHz} \\ 3060 & 1.5 \text{ GHz} \leq f \leq 6 \text{ GHz} \end{cases} \quad (\text{B.1})$$

$$P_{th} \text{ (mW)} = \begin{cases} ERP_{20 \text{ cm}} (d/20 \text{ cm})^x & d \leq 20 \text{ cm} \\ ERP_{20 \text{ cm}} & 20 \text{ cm} < d \leq 40 \text{ cm} \end{cases} \quad (\text{B.2})$$

where

$$x = -\log_{10} \left( \frac{60}{ERP_{20 \text{ cm}} \sqrt{f}} \right)$$

and  $f$  is in GHz,  $d$  is the separation distance (cm), and  $ERP_{20 \text{ cm}}$  is per Formula (B.1). The example values shown in Table B.2 are for illustration only.

Table B.2—Example Power Thresholds (mW)

Frequency (MHz)	Distance (mm)									
	5	10	15	20	25	30	35	40	45	50
300	39	65	88	110	129	148	166	184	201	217
450	22	44	67	89	112	135	158	180	203	226
835	9	25	44	66	90	116	145	175	207	240
1900	3	12	26	44	66	92	122	157	195	236
2450	3	10	22	38	59	83	111	143	179	219
3600	2	8	18	32	49	71	96	125	158	195
5800	1	6	14	25	40	58	80	106	136	169

Antenna gain = -0.65dBi

MAX Output Power : 1.931dBm@2402MHz

ERP = 1.931 - 0.65 - 2.15 = -0.869dBm

WORSE CASE:

$10^{-0.1931} = 1.560 \text{ mW} < 3 \text{ mW}$

Then SAR evaluation is not required

END