



# RF EXPOSURE EVALUATION REPORT

**FCC ID** : A4RG1KAW  
**Equipment** : Wireless Device  
**Model Name** : G1KAW  
**Applicant** : Google LLC  
1600 Amphitheatre Parkway,  
Mountain View, CA, 94043 USA  
**Standard** : 47 CFR Part 2.1091

We, SPORTON INTERNATIONAL INC has been evaluated this product in accordance with 47 CFR Part2.1091 and it complies with applicable limit.

Sporton Lab is accredited to ISO 17025 by Taiwan Accreditation Foundation (TAF code: 3786) and the FCC designation No. TW3786 under the FCC 2.948(e) by Mutual Recognition Agreement (MRA) in FCC evaluation.

The results in this report apply exclusively to the tested model / sample. Without written approval of SPORTON INTERNATIONAL INC. Laboratory, the test report shall not be reproduced except in full

Cona Huang

Approved by: Cona Huang / Deputy Manager



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## History of this test report



## 1. Description of Equipment Under Test (EUT)

Product Feature & Specification	
EUT Type	Wireless Device
Model Name	G1KAW
FCC ID	A4RG1KAW
Wireless Technology and Frequency Range	60.5GHz
Mode	60.5GHz: 2ASK

Reviewed by: Jason Wang

Report Producer: Paula Chen

## 2. Maximum RF average output power among production units

Mode	Maximum EIRP power(dBm)
60GHz	4



### **3. RF Exposure Limit Introduction**

According to ANSI/IEEE C95.1-1992, the criteria listed in Table 1 shall be used to evaluate the environmental impact of human exposure to radio frequency (RF) radiation as specified in §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 Exposures</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
300-1500			f/300	6
1500-100,000			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
300-1500			f/1500	30
1500-100,000			1.0	30

The MPE was calculated at 20 cm to show compliance with the power density limit.

The following formula was used to calculate the Power Density:

$$S = \frac{PG}{4\pi R^2}$$

Where:

S = Power Density

P = Output Power at Antenna Terminals

G = Gain of Transmit Antenna (linear gain)

R = Distance from Transmitting Antenna

### **4. Radio Frequency Radiation Exposure Evaluation**

Band	Maximum EIRP (dBm)	Maximum PG (mW)	Power Density at 20cm (mW/cm <sup>2</sup> )	Limit (mW/cm <sup>2</sup> )
60GHz	4.00	2.51	0.0005	1.000

**General Note:**

1. 60GHz RFx is not applicable according the user case, and it will be away 20cm from human body during operation.

### **Conclusion:**

According to 47 CFR §2.1091, the RF exposure analysis concludes that the RF Exposure is FCC compliant.