

# **RF Exposure Report**

Report No.: SA180627C01

FCC ID: ZFL-H1000

Test Model: H1000

Received Date: Jun. 07, 2018

Date of Evaluation: Jul. 24, 2018

**Issued Date:** Jul. 31, 2018

Applicant: Intel Corp.

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Issued By: Bureau Veritas Consumer Products Services (H.K.) Ltd., Taoyuan Branch

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R.O.C.

Test Location: No. 19, Hwa Ya 2nd Rd, Wen Hwa Vil, Kwei Shan Dist., Taoyuan City

33383, Taiwan (R.O.C)

FCC Registration /

788550 / TW0003

**Designation Number:** 





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## **Release Control Record**

Issue No.	Description	Date Issued
SA180627C01	Original Release	Jul. 31, 2018



## 1 Certificate of Conformity

Product: Responsive Retail Sensor (RRS)

Brand: Intel®

Test Model: H1000

Sample Status: Identical Prototype

Applicant: Intel Corp.

Date of Evaluation: Jul. 24, 2018

Standards: FCC Part 2 (Section 2.1091)

KDB 447498 D01 General RF Exposure Guidance v06

IEEE C95.1-1992

The above equipment has been tested by **Bureau Veritas Consumer Products Services (H.K.) Ltd., Taoyuan Branch**, and found compliance with the requirement of the above standards. The test record, data evaluation & Equipment Under Test (EUT) configurations represented herein are true and accurate accounts of the measurements of the sample's EMC characteristics under the conditions specified in this report.

Prepared by: , Date: Jul. 31, 2018

Rona Chen / Specialist

**Approved by :** , **Date:** Jul. 31, 2018

Dylan Chiou / Project Engineer



## 2 RF Exposure

#### 2.1 Limits for Maximum Permissible Exposure (MPE)

Frequency Range (MHz)	Electric Field Strength (V/m)	Magnetic Field Strength (A/m)	Power Density (mW/cm²)	Average Time (minutes)		
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 <sup>2</sup> )*	30		
30-300	27.5	0.073	0.2	30		
300-1500			f/1500	30		
1500-100,000			1.0	30		

f = Frequency in MHz; \*Plane-wave equivalent power density

#### 2.2 MPE Calculation Formula

 $Pd = (Pout*G) / (4*pi*r^2)$ 

where

Pd = power density in mW/cm<sup>2</sup>

Pout = output power to antenna in mW

G = gain of antenna in linear scale

Pi = 3.1416

R = distance between observation point and center of the radiator in cm

## 2.3 Classification

The antenna of this product, under normal use condition, is at least 20cm away from the body of the user. So, this device is classified as **Mobile Device**.

#### 2.4 Calculation Result of Maximum Conducted Power

Band	Frequency Band (MHz)	Max Power (dBm)	Antenna Gain (dBi)	Distance (cm)	Power Density (mW/cm²)	Limit (mW/cm²)
UHF RFID	902.75 ~ 927.25	27.03	6.35	20	0.433	0.60

### Note:

- 1. Antenna of EUT: Panel antenna with 8.5 dBic gain
- 2. Antenna Gain (dBi) = Antenna Gain (dBic) 2.15
- 3. Above used Max. Output Power is Max. Tune-up Power.

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