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# RF EXPOSURE REPORT

**REPORT NO.:** SA141013D01

**MODEL NO.:** AM30

**FCC ID:** QCIAM30

**RECEIVED:** Oct. 13, 2014

**TESTED:** Oct. 22 ~ Dec. 15, 2014

**ISSUED:** Dec. 23, 2014

**APPLICANT:** SMART Technologies Inc.

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CANADA

**ISSUED BY:** Bureau Veritas Consumer Products Services (H.K.)  
Ltd., Taoyuan Branch

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## RELEASE CONTROL RECORD

ISSUE NO.	REASON FOR CHANGE	DATE ISSUED
SA141013D01	Original release	Dec. 23, 2014



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## 1. CERTIFICATION

**PRODUCT:** PC Device  
**BRAND NAME:** SMART  
**MODEL NO.:** AM30  
**APPLICANT:** SMART Technologies Inc.  
**TESTED:** Oct. 22 ~ Dec. 15, 2014  
**TEST SAMPLE:** ENGINEERING SAMPLE  
**STANDARDS:** FCC Part 2 (Section 2.1091)  
KDB 447498 D03  
IEEE C95.1

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 :** Annie Chang , **DATE:** Dec. 23, 2014  
( Annie Chang / Supervisor )

**APPROVED BY :** Rex Lai , **DATE:** Dec. 23, 2014  
( Rex Lai / Assistant Manager )



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## 2. RF EXPOSURE LIMIT

### LIMITS FOR MAXIMUM PERMISSIBLE EXPOSURE (MPE)

FREQUENCY RANGE (MHz)	ELECTRIC FIELD STRENGTH (V/m)	MAGNETIC FIELD STRENGTH (A/m)	POWER DENSITY (mW/cm <sup>2</sup> )	AVERAGE TIME (minutes)
<b>LIMITS FOR GENERAL POPULATION / UNCONTROLLED EXPOSURE</b>				
300-1500	...	...	F/1500	30
1500-100,000	...	...	1.0	30

F = Frequency in MHz

## 3. MPE CALCULATION FORMULA

$$P_d = (P_{out} * G) / (4 * \pi * r^2)$$

where

$P_d$  = power density in mW/cm<sup>2</sup>

$P_{out}$  = 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

## 4. 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**.



## 5. CALCULATION RESULT OF MAXIMUM CONDUCTED POWER

FREQUENCY BAND (MHz)	MAX POWER (dBm)	ANTENNA GAIN (dBi)	DISTANCE (cm)	POWER DENSITY (mW/cm <sup>2</sup> )	LIMIT (mW/cm <sup>2</sup> )
2412 ~ 2462	17.79	2.18	20	0.0198	1.00
5180 ~ 5240	11.76	3.02	20	0.0060	1.00
5260 ~ 5320	11.64	3.02	20	0.0058	1.00
5500 ~ 5700	11.54	3.02	20	0.0057	1.00
5745 ~ 5825	12.00	3.02	20	0.0063	1.00
Bluetooth LE	1.95	2.18	20	0.0005	1.00
Bluetooth+EDR	5.67	2.18	20	0.0012	1.00

### CONCLUSION:

Both of the modules can transmit simultaneously, the formula of calculated the MPE is:

$$CPD1 / LPD1 + CPD2 / LPD2 + \dots \text{etc.} < 1$$

CPD = Calculation power density

LPD = Limit of power density

1. WLAN + Bluetooth LE =  $0.0198/1 + 0.0005/1 = 0.0203$

2. WLAN + Bluetooth+EDR =  $0.0198/1 + 0.0012/1 = 0.0210$

Therefore, the maximum calculation of this situation is 0.0210, which is less than the "1" limit.

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