



# RF EXPOSURE REPORT

**REPORT NO.:** SA120817C11

**MODEL NO.:** SMAC 5800

**FCC ID:** Q5A-SMAC-CPA58020

**RECEIVED:** Aug. 17, 2012

**TESTED:** Aug. 26 ~ Sep. 05, 2012

**ISSUED:** Sep. 07, 2012

**APPLICANT:** Sify Technologies Ltd

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

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**TEST LOCATION:** No. 19, Hwa Ya 2nd Rd, Wen Hwa Tsuen, Kwei  
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## RELEASE CONTROL RECORD

ISSUE NO.	REASON FOR CHANGE	DATE ISSUED
SA120817C11	Original release	Sep. 07, 2012



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## 1. CERTIFICATION

**PRODUCT:** CPA-58020-S  
**MODEL NO.:** SMAC 5800  
**BRAND:** Sify  
**APPLICANT:** Sify Technologies Ltd  
**TESTED:** Aug. 26 ~ Sep. 05, 2012  
**TEST SAMPLE:** ENGINEERING SAMPLE  
**STANDARDS:** FCC Part 2 (Section 2.1091)  
FCC OET Bulletin 65, Supplement C (01-01)  
IEEE C95.1

The above equipment (model: SMAC 5800) 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** :   
Andrea Hsia / Specialist , **DATE :** Sep. 07, 2012

**APPROVED BY** :   
Gary Chang / Technical Manager , **DATE :** Sep. 07, 2012



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## 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/cm <sup>2</sup> )	AVERAGE TIME (minutes)
LIMITS FOR GENERAL POPULATION / UNCONTROLLED EXPOSURE				
300-1500	...	...	F/1500	30
1500-100,000	...	...	1.0	30

F = Frequency in MHz

### 2.2 MPE CALCULATION FORMULA

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

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 31cm away from the body of the user. So, this device is classified as **Mobile Device**.



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## 2.4 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> )
5180-5240	5.91	17	31	0.016	1
5745-5825	23.60	17	31	0.951	1