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# RF EXPOSURE REPORT

**REPORT NO.:** SA141226D01

**MODEL NO.:** 9962 Multi-Standard Enterprise Cellxxxxx

**FCC ID:** P279962MCI

**RECEIVED:** Dec. 26, 2014

**TESTED:** Jan. 10 ~ Feb. 2, 2015

**ISSUED:** Feb. 5, 2015

**APPLICANT:** Sercomm Corp.

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

**LAB ADDRESS:** No. 47-2, 14th Ling, Chia Pau Vil., Lin Kou Dist., New  
Taipei City, Taiwan ( R.O.C. )

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## RELEASE CONTROL RECORD

ISSUE NO.	REASON FOR CHANGE	DATE ISSUED
SA141226D01	Original release	Feb. 5, 2015



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## 1. CERTIFICATION

**PRODUCT:** 9962 Multi-Standard AP; Metro Cell Indoor  
**BRAND NAME:** Alcatel-Lucent  
**MODEL NO.:** 9962 Multi-Standard Enterprise Cellxxxxx  
(where "x" is blank, number or any characters)  
**APPLICANT:** Sercomm Corp.  
**TESTED:** Jan. 10 ~ Feb. 2, 2015  
**TEST SAMPLE:** ENGINEERING SAMPLE  
**STANDARDS:** FCC Part 2 (Section 2.1091)  
KDB 447498 D03  
IEEE C95.1

The above equipment (Model: 9962 Multi-Standard Enterprise Cell) 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:** Feb. 5, 2015  
( Annie Chang / Supervisor )

**APPROVED BY :** Rex Lai , **DATE:** Feb. 5, 2015  
( 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)
LIMITS FOR GENERAL POPULATION / UNCONTROLLED EXPOSURE				
300-1500	...	...	F/1500	30
1500-100,000	...	...	1.0	30

F = Frequency in MHz

## 3. MPE CALCULATION FORMULA

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

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 30cm 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	29.97	8.71	30	0.6525	1.00
5180 ~ 5240	21.04	8.28	30	0.0756	1.00
5745 ~ 5825	21.06	8.28	30	0.0760	1.00
LTE Band 4	27.56	2.34	30	0.1944	1.00
LTE Band 12	28.17	3.64	30	0.0952	0.49
3G Band 2	23.71	3.61	30	0.1073	1.00
3G Band 5	24.22	2.70	30	0.0383	0.58

**NOTE:** 1. Directional gain for WLAN 2.4GHz =5.70dBi + 10log(2)= 8.71dBi

Directional gain for WLAN 5.0GHz =5.27dBi + 10log(2)= 8.28dBi

2. 2.4GHz & 5.0GHz can transmit simultaneously.

3G & LTE can't transmit simultaneously.

### 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 (2.4GHz) + WLAN (5.0GHz) + LTE =  $0.6525/1 + 0.0760/1 + 0.1944/1.00 = 0.9229$

2. WLAN (2.4GHz) + WLAN (5.0GHz) + 3G =  $0.6525/1 + 0.0760/1 + 0.1073/1.00 = 0.8358$

--- **END** ---