## SAR evaluation

## FCC ID: 2AL6K-BL-M8723DU4

MPE Calculation Method

 $E (V/m) = (30*P*G)^{0.5}/d$ 

Power Density: Pd  $(W/m2) = E^2/377$ 

E = Electric Field (V/m)

P = Peak RF output Power (W)

G = EUT Antenna numeric gain (numeric)

d = Separation distance between radiator and human body (m)

The formula can be changed to

 $Pd = (30*P*G) / (377*d^2)$ 

From the peak EUT RF output power, the minimum mobile separation distance, d=0.2m, as well

as the gain of the used antenna, the RF power density can be obtained.

## Calculated WIFI Result and Limit

(WORSE CASE IS AS BELOW, WIFI is the worst case)

Antenna	Peak Output	Power Density	Limit of Power	Test
Gain	Power (mW)	(S) (mW/cm2)	Density (S)	Result
(Numeric)			(mW/cm2)	
1.047	45.499	0.00948	1	Compiles
	(16.58dBm)			

## Note:

WIFI and Bluetooth cannot transmit simultaneously

Antenna Gain: 0.2dBi (2.4G Band)
Antenna Gain (Numeric): 1.047dBi