

## MAXIMUM PERMISSIBLE EXPOSURE (MPE)

### Related Submittal(s) / Grant (s)

This submittal(s) (test report) is intended to comply with § 2.1091 Radiofrequency radiation exposure evaluation: mobile devices of the FCC CFR 47 Rules, CFR 1.1310 (b) Radio frequency Radiation Exposure Requirement.

### Special Accessories

Not available for this EUT intended for grant

### Equipment Modifications

Not available for this EUT intended for grant.

### Limitation

Frequency Range (MHz)	Electric Field Strength (V/m)	Magnetic Field Strength (A/m)	Power Density (mW/cm <sup>2</sup> )	Averaging Time (minute)
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
1500-15000	/	/	1.0	30

F = frequency in MHz

\* = Plane-wave equipment power density

Unless otherwise stated the results shown in this test report refer only to the sample(s) tested and such sample(s) are retained for 90 days only.

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SGS Taiwan Ltd.

台灣檢驗科技股份有限公司

No.134,WuKungRoad,NewTaipeiIndustrialPark,WukuDistrict,NewTaipeiCity,Taiwan24803/新北市五股區新北產業園區五工路 134 號

t (886-2) 2299-3279

f (886-2) 2298-0488

[www.tw.sgs.com](http://www.tw.sgs.com)

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## Maximum Permissible Exposure (MPE) Evaluation

The evaluation and calculation as deduces below presents only worst-case that produces highest value of the result:

$$S = PG / 4\pi R^2$$

Where:  $S$  = Power density

$P$  = Power input to antenna

$G$  = Power gain of the antenna in the direction of interest relative to an isotropic radiator

$R$  = Distance to the center of radiation of the antenna

## 15.7 RF Exposure Evaluation

### Power Density Calculation (Worst Case)

Operation Mode	Evaluation Frequency (MHz)	Operation Distance (cm)	Max. output Power (dBm)	Antenna Gain (dBi)	Max. out-put Power EIRP (mW)	Power Density (mW/cm <sup>2</sup> )	Limit (mW/cm <sup>2</sup> )	Pass / Fail
WLAN 2.4G	2437.00	20	21.59	5.67	532.11	0.029	1.000	Pass
WLAN 5G	5825.00	20	23.21	6.57	950.60	0.042	1.000	Pass

**Note:** For conservativeness, the lowest uplink frequency of each band is used to determine the MPE limit of that band.

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