



Statement of compliance to Maximum Permissible Exposure (MPE) No. 170201711SHA-007

Applicant : Alcatel-Lucent Shanghai Bell Co., Ltd.

388-389#, Ningqiao Road, Pudong Jinqiao, Shanghai, China

Manufacturing site : Alcatel-Lucent Shanghai Bell Co., Ltd.

388-389#, Ningqiao Road, Pudong Jinqiao, Shanghai, China

Product Name : Digital Home CPE

Type/Model : A-240Z-A

EMA Code : 3FE 46615 AAAA

According to §2.1091, §2.1093 and §1.1307(b), systems operating under the provisions of this section shall be operated in a manner that ensures that the public is not exposed to radio frequency energy level in excess of the Commission's guidelines.

Date of issue: June 7, 2017

Prepared by:

Wade zhang

Wade Zhang (Project Engineer)

Daniel Zhao (Reviewer)

Reviewed by:





Power density (S) is calculated according to the formula:

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

Where $S = power density in mW/cm^2$

P = transmit power in mW

G = numeric gain of transmit antenna (numeric gain=Log-1(dB antenna gain/10))

R = distance (cm)

The calculations in the table below use the highest gain of antenna for client EUT. These calculations represent worst case in terms of the exposure levels.

<u> </u>										
Frequency band	Power		Antenna Gain		R	S	Limits			
(MHz)	dBm	mW	dBi	(Numeric)	(cm)	(mW/cm ²)	(mW/cm ²)			
2412 - 2462	26.76	474.24	3.0	2.0	20	0.189	1			
5180 - 5240	29.60	912.01	3.0	2.0	20	0.363	1			
5745 - 5825	27.46	557.19	3.0	2.0	20	0.222	1			
2405 - 2480	15.32	34.04	3.0	2.0	20	0.014	1			
908.4 - 916.0	-5.03	0.31	3.0	2.0	20	0.0001	1			

Frequency band	Max Permit Power with tolerance		Antenna Gain		R	S	Limits
(MHz)	dBm	mW	dBi	(Numeric)	(cm)	(mW/cm ²)	(mW/cm ²)
2412 - 2462	28.00	630.96	3.0	2.0	20	0.251	1
5180 - 5240	30.00	1000.00	3.0	2.0	20	0.398	1
5745 - 5825	30.00	1000.00	3.0	2.0	20	0.398	1
2405 - 2480	17.00	50.12	3.0	2.0	20	0.020	1
908.4 - 916.0	-3.00	0.50	3.0	2.0	20	0.0002	1

Note: 1 mW/cm² from 1.310 Table 1

For the device can support simultaneous transmission, according to 447498 D01 General RF Exposure Guidance v06,

For the device consider simultaneous transmission of WIFI2.4G, 5G, ZigBee and Z-Wave,

The worst MPE = $0.251 + 0.398 + 0.020 + 0.0002 = 0.669 \text{ mW/cm}^2 < 1 \text{ mW/cm}^2$.



Appendix I

Definition below must be outlined in the User Manual:

To satisfy FCC RF exposure requirements, a separation distance of **20** cm or more should be maintained between the antenna of this device and persons during device operation. To ensure compliance, operations at closer than this distance is not recommended.