

FCC RF Exposure

EUT Description:PA SYSTEM

ModelNo.:SP15,TITAN 15A,TITAN 15 COMBO,PR-212T,VENUE SET, CONCERT SET,800EX,CLUB-AB, CLUB-3500,CLUB-AEF,CLUB-2000,CLUB-1000,CLUB-1500,CLUB-2500,CLUB-4500,CLUB-5500,CLUB-6500, CLUB-7500,CLUB-8500,CLUB-9000,CLUB-9500, CLUB-3500 PLUS,MX 14,MX 16,MX 18,PR 915D, Freedom 10, Freedom 12S,CONCERT 18,CONCERT 828,STAGE-1260, STAGE 215,STAGE 218,STAGE 18, STAGE 15,STAGE 212, STAGE PRO 8, STAGE PRO 10, STAGE PRO 12, STAGE PRO 15, STAGE PRO 18, STAGE PRO 218,PRO 8, PRO 10, PRO 12, PRO 15, PRO 18, PRO 218,M 1000,M 2000, M 3000,M 4000, M 5000,M 6000,M 7000,M 8000,M 9000, M 1500,M 2500,M 3500,M 4500,M 5500,M 6500,M 7500, M 8500,M 9500,M 8,M 10,M 12,M 15,M 18,M 218,SP8, SP10, SP12, SP18, SP218

FCC ID: YEB-PASYSTEM-1

Equipment type: mobile equipment

Test procedures according to the technical standards: KDB 447498 D01 V06 andFCC 2.1091.

1. Limits

The criteria listed in the following table shall be used to evaluate the environment impact of human exposure to radio frequency (RF) radiation as specified in 1.1307(b)

Limits for Maximum Permissible Exposure (MPE)

Frequency range (MHz)	Electric field strength (V/m)	Magnetic field strength (A/m)	Power density (mW/cm ²)	Averaging time (minutes)
(A) Limits for Occupational/Controlled Exposures				
0.3–3.0	614	1.63	*(100)	6
3.0–30	1842/f	4.89/f	*(900/f ²)	6
30–300	61.4	0.163	1.0	6
300–1500			f/300	6
1500–100,000			5	6
(B) 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 ²)	30
30–300	27.5	0.073	0.2	30
300–1500			f/1500	30
1500–100,000			1.0	30

F = frequency in MHz

Formula: $Pd = (P_{out} * G) / (4 * \pi * r^2)$

Where :

Pd = power density in mW/cm²,

Pout = output power to antenna in mW;

G = gain of antenna in linear scale,

$\pi = 3.14$;

R = distance between observation point and center of the radiator in cm

Pd is the limit of MPE, 1 mW/cm². If we know the maximum gain of the antenna and the total power input to the antenna, through the calculation, we will know the distance r where the MPE limit is reached.

2. Test Procedure

Software provided by client enabled the EUT to transmit and receive data at lowest, middle and highest channel individually.

3. Test Result of RF Exposure Evaluation

WIFI

	Output power(dBm)	Max tune-up(mW)	Antenna Gain(dBi)	Power Density at R=20cm (mW/cm ²)	Limit (mW/cm ²)	Result
2402	1.32	1.36	-0.68	0.00023	1.0	Pass
2441	2.67	1.85	-0.68	0.00031	1.0	Pass
2480	3.21	2.09	-0.68	0.00036	1.0	Pass

Conclusion: No SAR is required