FCC 47 CFR MPE REPORT

DESAY A&V SCIENCE AND TECHNOLOGY CO.,LTD

BLU-RAY DISC PLAYER

Model Number: DS-B202-R

Additional Mode: HBD316
DS-XXXXX(where X could be any alphanumeric or blank)

FCC ID: XJGDS0015

Prepared for : DESAY A&V SCIENCE AND TECHNOLOGY CO.,LTD
Desay 3rd Industry Zone, Chenjiang Town, Huizhou City, Guangdong,
516229, China

Prepared By : EST Technology Co., Ltd.
Santun(guantai Road), Houjie Town,
DongGuan City,GuangDong, China.
Tel: 86-769-83081888-808

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Maximum Permissible Exposure

1、Applicable Standard

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 limit for maximum permissible exposure. In accordance with 47 CFR FCC Part 2 Subpart J, section 2.1091 this device has been defined as a mobile device whereby a distance of 0.2m normally can be maintained between the user and the device.

(a)、Limits for Occupational / Controlled Exposure

Frequency Range (MHz)	Electric Field Strength E) (V/m)	Magnetic Field Strength (H) (A/m)	Power Density (S) (mW/cm2)	Averaging Times｜E｜2，｜H｜2 or S (minutes)
0.3-3.0	614	1.63	(100)*	6
3.0-30	1842/f	4.89/f	(900/f)*	6
30-300	61.4	0.163	1.0	6
300-1500			F/300	6
1500-10000			5	6

(b)、Limits for General Population / Uncontrolled Exposure

Frequency Range (MHz)	Electric Field Strength E) (V/m)	Magnetic Field Strength (H) (A/m)	Power Density (S) (mW/cm2)	Averaging Times｜E｜2，｜H｜2 or S (minutes)
0.3-1.34	614	1.63	(100)*	30
1.34-30	824/f	2.19/f	(180/f)*	30
30-300	27.5	0.073	0.2	30
300-1500			F/1500	30
1500-10000			1.o	30

Note: f=frequency in MHz; *Plane-wave equivalent power density

2、MPE Calculation Method

E (V/m) = (30*P*G) 0.5/d Power Density: Pd (W/m2) = E2/377

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*d2)

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

3、Calculated Result and Limit

Mode	Channel	Frequency (MHz)	Peak output power (dBm)	Peak output power (mW)	Antenna gain		Power Density (S) (mW/cm2)	Limited of Power Density (S) (mW/cm2)	Test Result
					(dBi)	(Linear)			
IEEE 802.11b	Low :CH1	2412	13.22	20.989	2	1.584	**0.00661**	1	Compiles
	Middle: CH6	2437	12.66	18.450	2	1.584	**0.00581**	1	Compiles
	High: CH11	2462	11.94	15.631	2	1.584	**0.00492**	1	Compiles
IEEE 802.11g	Low :CH1	2412	15.32	34.040	2	1.584	**0.01072**	1	Compiles
	Middle: CH6	2437	15.06	32.062	2	1.584	**0.01010**	1	Compiles
	High: CH11	2462	14.58	28.707	2	1.584	**0.00904**	1	Compiles
IEEE 802.11n HT20	Low :CH1	2412	15.11	32.433	2	1.584	**0.01022**	1	Compiles
	Middle: CH6	2437	14.81	30.269	2	1.584	**0.00953**	1	Compiles
	High: CH11	2462	14.44	27.797	2	1.584	**0.00875**	1	Compiles
IEEE 802.11n HT40	Low :CH1	2422	13.12	20.511	2	1.584	**0.00921**	1	Compiles
	Middle: CH4	2437	12.85	19.275	2	1.584	**0.00607**	1	Compiles
	High: CH7	2452	12.38	17.298	2	1.584	**0.00545**	1	Compiles