FCC 47 CFR MPE REPORT

Jiangmen Dascom Computer Peripherals Co.,Ltd.

portable receipt and form printer

Model Number: DP-581H

Additional Model: DP-581T

FCC ID: Z7ODP581T

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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、Conducted Power Result

Mode	Frequency (MHz)	Peak output power (dBm)	Peak output power (mW)	Target power（dBm）	Antenna gain	
					(dBi)	(Linear)
IEEE 802.11b	2412	16.54	45.082	16±1	-7.38	0.183
	2437	15.89	38.815	15±1	-7.38	0.183
	2462	16.09	40.644	16±1	-7.38	0.183
IEEE 802.11g	2412	9.91	9.795	9±1	-7.38	0.183
	2437	9.82	9.594	9±1	-7.38	0.183
	2462	9.88	9.727	9±1	-7.38	0.183
IEEE 802.11n HT20	2412	8.70	7.413	8±1	-7.38	0.183
	2437	8.73	7.464	8±1	-7.38	0.183
	2462	8.95	7.852	8±1	-7.38	0.183
IEEE 802.11n HT40	2422	9.31	8.531	9±1	-7.38	0.183
	2437	8.63	7.295	8±1	-7.38	0.183
	2452	9.52	8.954	9±1	-7.38	0.183

4、Calculated Result and Limit

Mode	Target power（dBm）	Antenna gain		Power Density (S) (mW /cm2)	Limited of Power Density (S) (mW /cm2)	Test Result
		(dBi)	(Linear)			
IEEE 802.11b	17	-7.38	0.183	**0.00182**	1	Compiles
IEEE 802.11g	10	-7.38	0.183	**0.00036**	1	Compiles
IEEE 802.11n HT20	9	-7.38	0.183	**0.00029**	1	Compiles
IEEE 802.11n HT40	10	-7.38	0.183	**0.00036**	1	Compiles