FCC 47 CFR MPE REPORT

CHOICE FORTUNE HOLDINGS LIMITED

LED TV

Model Number: SC-32HK860N

FCC ID: 2AMYC-SC-32HK860N

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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

3.1 Antenna 0

Mode	Frequency (MHz)	Peak output power (dBm)	Peak output power (mW)	Target power（dBm）	Antenna gain	
					(dBi)	(Linear)
IEEE 802.11b	2412	11.93	15.60	12±2	2.0	1.6
	2437	11.61	14.49	12±2	2.0	1.6
	2462	11.12	12.94	11±2	2.0	1.6
IEEE 802.11g	2412	6.96	4.97	7±2	2.0	1.6
	2437	7.62	5.78	8±2	2.0	1.6
	2462	7.00	5.01	7±2	2.0	1.6
IEEE 802.11n HT20	2412	7.04	5.06	7±2	2.0	1.6
	2437	6.95	4.95	7±2	2.0	1.6
	2462	5.82	3.82	6±2	2.0	1.6
IEEE 802.11n HT40	2422	4.88	3.08	5±2	2.0	1.6
	2437	5.07	3.21	5±2	2.0	1.6
	2452	4.69	2.94	5±2	2.0	1.6

3.2 Antenna 1

Mode	Frequency (MHz)	Peak output power (dBm)	Peak output power (mW)	Target power（dBm）	Antenna gain	
					(dBi)	(Linear)
IEEE 802.11b	2412	11.93	15.60	13±2	2.0	1.6
	2437	11.61	14.49	13±2	2.0	1.6
	2462	11.12	12.94	12±2	2.0	1.6
IEEE 802.11g	2412	6.96	4.97	9±2	2.0	1.6
	2437	7.62	5.78	8±2	2.0	1.6
	2462	7.00	5.01	8±2	2.0	1.6
IEEE 802.11n HT20	2412	7.04	5.06	9±2	2.0	1.6
	2437	6.95	4.95	8±2	2.0	1.6
	2462	5.82	3.82	7±2	2.0	1.6
IEEE 802.11n HT40	2422	4.88	3.08	5±2	2.0	1.6
	2437	5.07	3.21	6±2	2.0	1.6
	2452	4.69	2.94	5±2	2.0	1.6

4、Calculated Result and Limit

4.1 Antenna 0

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	14	2.0	1.6	0.00792	1	Compiles
IEEE 802.11g	10	2.0	1.6	0.00315	1	Compiles
IEEE 802.11n HT20	9	2.0	1.6	0.00250	1	Compiles
IEEE 802.11n HT40	7	2.0	1.6	0.00100	1	Compiles

4.2 Antenna 1

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	15	2.0	1.6	0.00997	1	Compiles
IEEE 802.11g	11	2.0	1.6	0.00397	1	Compiles
IEEE 802.11n HT20	11	2.0	1.6	0.00397	1	Compiles
IEEE 802.11n HT40	8	2.0	1.6	0.00199	1	Compiles

4.3 Antenna 0+1

Mode	Power Density (S) (mW /cm2) Antenna 0	Power Density (S) (mW /cm2) Antenna 1	Power Density (S) (mW /cm2) Total	Limited of Power Density (S) (mW /cm2)	Test Result
IEEE 802.11n HT20	0.00250	0.00397	0.00647	1	Compiles
IEEE 802.11n HT40	0.00100	0.00199	0.00299	1	Compiles