RF Exposure Estimation Report

Applicant:	Shenzhen Videotimes Technology Co., Ltd.
Product:	Baby monitor
FCC-ID	2AF2R-HB32RX
Model No.:	HB32RX
RF Transmission Frequency:	2403.5-2475.5MHz
RF report #	68.950.17.039.02

1. Limit and Guidelines on Exposure to Electromagnetic Fields

According to§15.247(e)(i) and §1.1307(b)(1), systems operating under the provisions of this section shall be operated in a manner that ensure that the public is not exposed to radio frequency energy level in excess of the Commission's guideline.

According to KDB 447498 D01 Mobile Portable RF Exposure v05r02, no SAR required if power is lower than the flowing threshold:

At 100 MHz to 6 GHz and for test separation distances > 50 mm, the SAR test exclusion threshold is determined according to the following, and as illustrated in Appendix B: Approximate SAR test exclusion power thresholds at selected frequencies and test separation distances are illustrated in the following table. The equation and threshold in section 4.3.1 must be applied to determine SAR test exclusion.

MHz	50	60	70	80	90	100	110	120	130	140	150	160	170	180	190	mm
100	474	481	487	494	501	507	514	521	527	534	541	547	554	561	567	
150	387	397	407	417	427	437	447	457	467	477	487	497	507	517	527	
300	274	294	314	334	354	374	394	414	434	454	474	494	514	534	554	
450	224	254	284	314	344	374	404	434	464	494	524	554	584	614	644	
835	164	220	275	331	387	442	498	554	609	665	721	776	832	888	943	
900	158	218	278	338	398	458	518	578	638	698	758	818	878	938	998	
1500	122	222	322	422	522	622	722	822	922	1022	1122	1222	1322	1422	1522	mW
1900	109	209	309	409	509	609	709	809	909	1009	1109	1209	1309	1409	1509	
2450	96	196	296	396	496	596	696	796	896	996	1096	1196	1296	1396	1496	
3600	79	179	279	379	479	579	679	779	879	979	1079	1179	1279	1379	1479	
5200	66	166	266	366	466	566	666	766	866	966	1066	1166	1266	1366	1466	
5400	65	165	265	365	465	565	665	765	865	965	1065	1165	1265	1365	1465	
5800	62	162	262	362	462	562	662	762	862	962	1062	1162	1262	1362	1462	

The test exclusions are applicable only when the minimum test separation distance is \geq 60 mm the transmitter \geq 196mW(22.92dBm), and for transmission frequencies between 100 MHz and 6 GHz. When the minimum test separation distance is \geq 60 mm, a distance of 60 mm and the EUT transmitter power 20.58dBm(19.38dBm conducted power+1.2dBi Antenna gain) according to 5) in section 4.3.1 is applied to determine SAR test exclusion.

2. Calculation method

[Power allowed at numeric threshold for 50 mm in step 1) + (test separation distance - 50 mm)·10] mW at > 1500 MHz and \leq 6 GHz [(max. power of channel, including tune-up tolerance, mW)/(min. test separation distance, mm)] [\sqrt{f} (GHz)] \leq 3.0 for 1-g SAR and \leq 7.5 for 10-g extremity SAR

Conducted Power + tune up tolerance = 86.69mW Distance = 50 mm f = 2.4755 GHz

[86.69/50] * SQRT(2.4755) =<u>1.102</u>

1.102 ≤ 3.0

Therefore, excluded from SAR testing.

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