1. RF EXPOSURE EVALUATION

Test Result of RF Exposure Evaluation

According to the KDB-447498 D01 V06, FCC 47CFR § 2.1093 the following RF exposure evaluation shall to demonstrate RF exposure compliance.

[(max. power of channel, including tune-up tolerance, mW) / (min. test separation distance,mm)] $* [\sqrt{f(GHz)}]$

BT3.0

	Peak Output power	Target power W/ tolerance (dBm)	Max tune up power tolerance (dBm)	Maximum Output Power: mW	Separation distance mm	RF exposure		
1Mbps								
2402	-0.655	-0.5±1.0	0.5	1.122	5	0. 348		
2441	-0.771	-0.5±1.0	0.5	1.122	5	0.351		
2480	-1.032	-0.5±1.0	0.5	1.122	5	0. 353		
	2Mbps							
2402	-3.580	-3±1.0	-2	0.631	5	0. 196		
2441	-2.563	-3±1.0	-2	0.631	5	0. 197		
2480	-2.363	-3±1.0	-2	0.631	5	0. 199		
3Mbps								
2402	-3.240	-3±1.0	-2	0.631	5	0. 196		
2441	-2.321	-3±1.0	-2	0.631	5	0. 197		
2480	-2.221	-3±1.0	-2	0.631	5	0. 199		

BT4.0

	Peak Output power	Target power W/ tolerance (dBm)	Max tune up power tolerance (dBm)	Maximum Output Power: mW	Separation distance mm	RF exposure
2402	-1.816	-2 ±1.0	-1.0	0.794	5	0.246
2440	-2.352	-2±1.0	-1.0	0.794	5	0.248
2480	-2.037	-2±1.0	-1.0	0.794	5	0.250

WIFI 2.4G

	Average Conducted Output Power (dBm)	Target power W/ tolerance (dBm)	Max tune up power tolerance (dBm)	Maximum Average Output Power: mW	Separation distance mm	RF exposure			
	802.11B								
2412	7.91	8±1.0	9	7.943	5	2. 467			
2437	8.47	8±1.0	9	7.943	5	2. 480			
2462	8.58	8±1.0	9	7.943	5	2. 493			
	802.11G								
2412	7.36	7±1.0	8	6.310	5	1. 960			
2437	7.24	7±1.0	8	6.310	5	1. 970			
2462	7.29	7±1.0	8	6.310	5	1. 980			
	802.11N(20)								
2412	7.39	7±1.0	8	6.310	5	1. 960			
2437	7.01	7±1.0	8	6.310	5	1. 970			
2462	7.24	7±1.0	8	6.310	5	1. 980			
	802.11N(40)								
2422	6.94	6±1.0	7	5.012	5	1.560			
2437	6.67	6±1.0	7	5.012	5	1. 565			
2452	6.71	6±1.0	7	5.012	5	1.570			

The Max RF exposure is 2.493

Threshold at which no SAR required is ≤ 3.0 for 1-g SAR, Separation distance is 5mm.

Conclusion:

So no SAR is required.