

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.

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

* $[\sqrt{f(\text{GHz})}]$

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	2.64	2.0±1.0	3	1.995	5	0.618
2441	2.58	2.0±1.0	3	1.995	5	0.623
2480	2.14	2.0±1.0	3	1.995	5	0.628
2Mbps						
2402	1.98	1.0±1.0	2	1.585	5	0.491
2441	2.00	1.0±1.0	2	1.585	5	0.495
2480	1.50	1.0±1.0	2	1.585	5	0.499
3Mbps						
2402	2.28	2.0±1.0	3	1.995	5	0.618
2441	2.26	2.0±1.0	3	1.995	5	0.623
2480	1.77	2.0±1.0	3	1.995	5	0.628

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	-2.542	-2 ±1.0	-1.0	0.794	5	0.246
2440	-2.412	-2±1.0	-1.0	0.794	5	0.248
2480	-2.121	-2±1.0	-1.0	0.794	5	0.250

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	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	9.25	8.5±1.0	9.5	8.913	5	2.768
2437	9.34	8.5±1.0	9.5	8.913	5	2.744
2462	9.35	8.5±1.0	9.5	8.913	5	2.885
802.11G						
2412	8.42	8.0±1.0	9.0	7.943	5	2.467
2437	8.51	8.0±1.0	9.0	7.943	5	2.446
2462	8.33	8.0±1.0	9.0	7.943	5	2.571
802.11N(20)						
2412	7.62	7.0±1.0	8.0	6.310	5	1.960
2437	7.52	7.0±1.0	8.0	6.310	5	1.943
2462	7.55	7.0±1.0	8.0	6.310	5	2.043
802.11N(40)						
2422	7.62	7.0±1.0	8.0	6.310	5	1.964
2437	7.55	7.0±1.0	8.0	6.310	5	1.943
2452	7.42	7.0±1.0	8.0	6.310	5	2.003

The Max RF exposure is 2.885

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

Conclusion:

So no SAR is required.