

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.

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

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

BT						
	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	-0.813	-1.1±1.0	-0.1	0.977	5	0.303
2441	-2.028	-1.1±1.0	-0.1	0.977	5	0.305
2480	-0.294	-1.1±1.0	-0.1	0.977	5	0.308
2Mbps						
2402	-1.549	-2.28±1.0	-1.28	0.745	5	0.231
2441	-3.269	-2.28±1.0	-1.28	0.745	5	0.233
2480	-1.235	-2.28±1.0	-1.28	0.745	5	0.235
3Mbps						
2402	-1.527	-2.3±1.0	-1.3	0.741	5	0.230
2441	-3.239	-2.3±1.0	-1.3	0.741	5	0.231
2480	-1.412	-2.3±1.0	-1.3	0.741	5	0.233
BLE						
2402	1.754	1.8±1.0	2.8	1.905	5	0.590
2440	2.231	1.8±1.0	2.8	1.905	5	0.595
2480	2.632	1.8±1.0	2.8	1.905	5	0.600

WIFI						
	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	9.28	8.6±1.0	9.6	9.120	5	2.833
2437	9.57	8.6±1.0	9.6	9.120	5	2.847
2462	9.25	8.6±1.0	9.6	9.120	5	2.862
802.11G						
2412	8.27	8.0±1.0	9.0	7.943	5	2.467
2437	8.59	8.0±1.0	9.0	7.943	5	2.480
2462	8.20	8.0±1.0	9.0	7.943	5	2.493
802.11N(20)						
2412	7.58	7.0±1.0	8.0	6.310	5	1.960
2437	7.78	7.0±1.0	8.0	6.310	5	1.970
2462	7.33	7.0±1.0	8.0	6.310	5	1.980
802.11N(40)						
2422	6.58	6.0±1.0	7.0	5.012	5	1.560
2437	6.78	6.0±1.0	7.0	5.012	5	1.565
2452	6.33	6.0±1.0	7.0	5.012	5	1.570

The Max RF exposure is 2.862

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

Conclusion:

So no SAR is required.