

Test Result of RF Exposure Evaluation

According to the KDB-447498 D01 V06, FCC 47CFR § 2.1091 the following RF exposure evaluation shall to demonstrate RF exposure compliance.

Friis transmission formula: $P_d = (P_{out} * G) / (4 * \pi * r^2)$

Where

P_d = power density in mW/cm², P_{out} = output power to antenna in mW;

G = gain of antenna in linear scale, $\pi = 3.1416$;

R = distance between observation point and center of the radiator in cm.

BT3.0

Frequency (MHz)	Output Power (dBm)	Target power W/ tolerance (dBm)	Max tune up power tolerance (dBm)	Output power to antenna (mW)	Antenna Gain(dBi)	Power Density at R=20cm (mW/cm ²)	Limit (mW/cm ²)	Result
1Mbps								
2402	4.194	5±1.0	6	3.981	0	0.000792	1	Pass
2441	5.111	5±1.0	6	3.981	0	0.000792	1	Pass
2480	4.276	5±1.0	6	3.981	0	0.000792	1	Pass
2Mbps								
2402	1.297	2±1.0	3	1.995	0	0.000397	1	Pass
2441	2.542	2±1.0	3	1.995	0	0.000397	1	Pass
2480	1.631	2±1.0	3	1.995	0	0.000397	1	Pass
3Mbps								
2402	1.793	2±1.0	3	1.995	0	0.000397	1	Pass
2441	3.000	2±1.0	3	1.995	0	0.000397	1	Pass
2480	2.123	2±1.0	3	1.995	0	0.000397	1	Pass

BT4.0

Frequency (MHz)	Output Power (dBm)	Target power W/ tolerance (dBm)	Max tune up power tolerance (dBm)	Output power to antenna (mW)	Antenna Gain(dBi)	Power Density at R=20cm (mW/cm2)	Limit (mW/cm2)	Result
2402	5.985	6±1.0	7.0	5.012	0	0.000997	1	Pass
2440	6.857	6±1.0	7.0	5.012	0	0.000997	1	Pass
2480	5.537	6±1.0	7.0	5.012	0	0.000997	1	Pass

Conclusion:

So no SAR is required.