

RF Exposure Evaluation

FCC ID:2BDTW-P3

REQUIREMENT

KDB447498 D01 General RF Exposure Guidance v06, Clause 4.3.1(a)

$$[(\text{max. power of channel, including tune-up tolerance, mW}) / (\text{min. test separation distance, mm})] \cdot [\sqrt{f(\text{GHz})}] \leq 3.0$$

Where

-f(GHz) is the RF channel transmit frequency in GHz

-Power and distance are rounded to the nearest mW and mm before calculation

-The test exclusions are applicable only when the minimum test separation distance is ≤ 50 mm, and for transmission frequencies between 100 MHz and 6 GHz. When the minimum test separation distance is < 5 mm, a distance of 5 mm according to 4.1 f) is applied to determine SAR test exclusion.

TEST RESULT

☒ Passed

☐ Not Applicable

2.4G WIFI

Test mode	Channel Frequency (MHz)	Max. Measured Power (dBm)	Max. Tune up tolerance Power (dBm)	Max. Tune up Power (dBm)	Max. Tune up tolerance Power (mW)	Calculating data	Limit	Results
802.11b	2412	3.68	± 1	4.68	2.94	0.9125	3.00	Pass
	2437	4.46	± 1	5.46	3.52	1.0976		
	2462	2.09	± 1	3.09	2.04	0.6393		
802.11g	2412	5.33	± 1	6.33	4.30	1.3342		
	2437	5.33	± 1	6.33	4.30	1.3411		
	2462	4.08	± 1	5.08	3.22	1.0108		
802.11n (HT20)	2412	5.43	± 1	6.43	4.40	1.3653		
	2437	5.19	± 1	6.19	4.16	1.2985		
	2462	3.97	± 1	4.97	3.14	0.9855		
802.11 (HT40)	2422	5.10	± 1	6.1	4.07	1.2680		
	2437	4.79	± 1	5.79	3.79	1.1843		
	2452	4.61	± 1	5.61	3.64	1.1397		



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5GWIFI BAND I

Test mode	Channel Frequency (MHz)	Max. Measured Power (dBm)	Max. Tune up tolerance Power (dBm)	Max. Tune up Power (dBm)	Max. Tune up tolerance Power (mW)	Calculating data	Limit	Results
802.11a	5180	4.09	±1	5.09	3.23	1.4696	3.00	Pass
	5220	4.62	±1	5.62	3.65	1.6667		
	5240	4.35	±1	5.35	3.43	1.5693		
802.11n (HT20)	5180	4.25	±1	5.25	3.35	1.5247		
	5220	4.39	±1	5.39	3.46	1.5808		
	5240	4.19	±1	5.19	3.30	1.5125		
802.11n (HT40)	5190	4.56	±1	5.56	3.60	1.4728		
	5230	4.62	±1	5.62	3.65	1.6683		
802.11 ac(HT20)	5180	4.19	±1	5.19	3.30	1.5038		
	5220	4.34	±1	5.34	3.42	1.5627		
	5240	4.34	±1	5.34	3.42	1.5657		
802.11 ac(HT40)	5190	4.51	±1	5.51	3.56	1.6204		
	5230	4.53	±1	5.53	3.57	1.6341		



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5GWIFI BAND IV

Test mode	Channel Frequency (MHz)	Max. Measured Power (dBm)	Max. Tune up tolerance Power (dBm)	Max. Tune up Power (dBm)	Max. Tune up tolerance Power (mW)	Calculating data	Limit	Results
802.11a	5745	3.08	±1	4.08	2.56	1.2265	3.00	Pass
	5785	2.56	±1	3.56	2.27	1.0919		
	5825	2.63	±1	3.63	2.31	1.1135		
802.11n (HT20)	5745	3.86	±1	4.86	3.06	1.4678		
	5785	3.61	±1	4.61	2.89	1.3905		
	5825	2.72	±1	3.72	2.36	1.1368		
802.11n (HT40)	5755	3.94	±1	4.94	3.12	1.4964		
	5795	3.34	±1	4.34	2.72	1.3078		
802.11 ac(HT20)	5745	4.02	±1	5.02	3.18	1.5229		
	5785	3.65	±1	4.65	2.92	1.4034		
	5825	2.74	±1	3.74	2.37	1.1420		
802.11 ac(HT40)	5755	4.18	±1	5.18	3.30	1.5814		
	5795	3.37	±1	4.37	2.74	1.3169		



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BLE

Test mode	Channel Frequency (MHz)	Max. Measured Power (dBm)	Max. Tune up tolerance Power (dBm)	Max. Tune up Power (dBm)	Max. Tune up tolerance Power (mW)	Calculating data	Limit	Results
BLE 1M	2402	1.23	±1	2.23	1.67	0.5180	3.00	Pass
	2440	2.11	±1	3.11	2.05	0.6393		
	2480	1.98	±1	2.98	1.99	0.6255		
BLE 2M	2402	1.09	±1	2.09	1.62	0.5016		
	2440	1.96	±1	2.96	1.98	0.6176		
	2480	1.97	±1	2.97	1.98	0.6241		

BT

Test mode	Channel Frequency (MHz)	Max. Measured Power (dBm)	Max. Tune up tolerance Power (dBm)	Max. Tune up Power (dBm)	Max. Tune up tolerance Power (mW)	Calculating data	Limit	Results
DH5	2402	1.43	±1	2.43	1.75	0.5424	3.00	Pass
	2441	1.07	±1	2.07	1.61	0.5033		
	2480	1.13	±1	2.13	1.63	0.5143		
2DH5	2402	0.25	±1	1.25	1.33	0.4133		
	2441	-0.15	±1	0.85	1.22	0.3800		
	2480	-0.37	±1	0.63	1.16	0.3641		
3D5H	2402	0.16	±1	1.16	1.31	0.4049		
	2441	-0.07	±1	0.93	1.24	0.3871		
	2480	-0.35	±1	0.65	1.16	0.3658		

Note:

- The exposure safety distance is less than 5mm.
- The 5GWIFI, 2.4GWIFI, BLE and BT can not be transmit simultaneously.

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