

RF Exposure Evaluation

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

$f(\text{GHz})$ 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

Type	Test Mode	Test Channel	Maximum Tune-up (dBm)
2.4G WiFi	802.11b	Lowest	8.00
		Middle	8.00
		Highest	8.00
	802.11g	Lowest	9.70
		Middle	9.70
		Highest	9.70
	802.11n(H20)	Lowest	9.70
		Middle	9.70
		Highest	9.70
5G WiFi	802.11a	Lowest	8.00
		Middle	8.00
		Highest	8.00
	802.11n(H20)	Lowest	8.00
		Middle	8.00
		Highest	8.00

Type	Test Mode	Conducted Output Power (dBm)	Maximum Tune-up (dBm)	Calculating data	Limit	Result
2.4G WiFi	802.11b	7.28	8.00	1.960	3.00	Pass
		7.50	8.00	1.972	3.00	Pass
		7.96	8.00	1.984	3.00	Pass
	802.11g	8.83	9.70	2.899	3.00	Pass
		8.84	9.70	2.917	3.00	Pass
		9.64	9.70	2.935	3.00	Pass
	802.11n(H20)	9.17	9.70	2.899	3.00	Pass
		8.50	9.70	2.917	3.00	Pass
		9.69	9.70	2.935	3.00	Pass
5G WiFi	802.11a	7.14	8.00	2.872	3.00	Pass
		7.69	8.00	2.883	3.00	Pass
		7.62	8.00	2.889	3.00	Pass
	802.11n(H20)	7.58	8.00	2.872	3.00	Pass
		7.19	8.00	2.883	3.00	Pass
		7.56	8.00	2.889	3.00	Pass

Note:

- 1) The maximum antenna gain is 3.0dBi for 2.4GHz and 3.3dBi for 5GHz
- 2) The exposure evaluation safety distance is 5mm.