

8 CONDUCTED RF OUPUT POWER

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8.1 WIFI Output Power

8.1.1 WIFI2.4G Output Power

WIFI2.4G-ANT2-Full Power						
2.4G	Mode	Channal	Frequency (MHz)	AV power (dBm)	Tune up (dBm)	SAR Test
	11b	1	2412	9.08	11.00	Yes
		6	2437	9.53	11.00	Yes
		11	2462	10.43	11.00	Yes
	11g	1	2412	13.77	14.00	No
		6	2437	13.27	14.00	No
		11	2462	14.22	15.00	No
	11n-HT20	1	2412	12.85	13.00	No
		6	2437	13.10	14.00	No
		11	2462	12.99	14.00	No
	11n-HT40	3	2422	13.54	14.00	Yes
		6	2437	16.17	17.00	Yes
		9	2452	12.85	14.00	Yes
Note: When multiple channel bandwidth configurations in a frequency band have the same maximum tune-up output power, the test configuration is determined by applying the following steps sequentially. 1) The largest channel bandwidth configuration is selected between the multiple configurations in a frequency band with the same maximum tune-up output power. 2) When multiple transmission modes (802.11b/g/n) have the same maximum tune-up output power, largest channel bandwidth, lowest order modulation and lowest data rate, the lowest order 802.11 mode is selected; i.e., 802.11b is chosen over 802.11g, and 802.11g chosen over 802.11n.						

8.1.2 WIFI5G Output Power

WIFI5G-Full Power						
5.2G	Mode	Channel	Frequency (MHz)	AV power (dBm)	Tune up (dBm)	SAR Test
	11a	36	5180	16.90	18.00	Yes
		44	5220	18.36	18.50	Yes
		48	5240	17.28	17.50	Yes
	11n20	36	5180	14.66	16.50	No
		44	5220	15.59	16.50	No
		48	5240	15.06	16.50	No
	11n40	38	5190	11.79	12.00	No
		46	5230	15.59	17.00	No
	11ac20	36	5180	12.70	14.00	No
		44	5220	13.46	14.00	No
		48	5240	13.39	14.00	No
	11ac40	38	5190	12.66	14.50	No
46		5230	14.12	14.50	No	
11ac80	42	5210	10.13	12.00	No	
5.3G	11a	52	5260	14.98	16.00	No
		60	5300	14.20	16.00	No
		64	5320	15.28	16.00	No
	11n20	52	5260	15.68	16.50	No
		60	5300	15.89	16.50	No
		64	5320	16.11	16.50	No
	11n40	54	5270	15.89	17.00	No
		62	5310	16.23	17.00	No
	11ac20	52	5260	14.10	15.00	No
		60	5300	14.31	15.00	No
		64	5320	14.55	15.00	No
	11ac40	54	5270	14.37	15.00	No
		62	5310	14.70	15.00	No
11ac80	58	5290	14.11	14.50	No	
5.6G	11a	100	5500	16.42	17.00	Yes
		116	5580	16.51	17.00	Yes
		140	5700	16.68	17.00	Yes
	11n20	100	5500	14.11	16.00	No
		116	5580	14.82	16.00	No
		140	5700	15.32	16.00	No
	11n40	102	5510	14.39	16.00	No
		118	5590	15.31	16.00	No
		134	5670	15.67	16.00	No
	11ac20	100	5500	12.73	14.00	No
		116	5580	13.08	14.00	No
		140	5700	13.53	14.00	No
	11ac40	102	5510	13.07	15.00	No
118		5590	13.36	15.00	No	
134		5670	13.87	15.00	No	
106		5530	12.86	14.50	No	
11ac80	122	5610	12.96	14.50	No	
	149	5745	15.57	16.50	No	
5.8G	11a	157	5785	15.72	16.50	No
		165	5825	16.00	16.50	No
		149	5745	15.59	16.50	No
	11n20	157	5785	15.57	16.50	No
		165	5825	15.85	16.50	No
		151	5755	15.69	16.50	Yes
	11n40	159	5795	15.52	16.50	Yes
		149	5745	13.87	15.00	No
	11ac20	157	5785	13.82	15.00	No
		165	5825	14.73	15.00	No
		151	5755	13.98	15.00	No
	11ac40	159	5795	13.92	15.00	No
		155	5775	13.72	14.50	No
Note: When multiple channel bandwidth configurations in a frequency band have the same maximum tune-up output power, the test configuration is determined by applying the following steps sequentially. 1)When the same maximum output power is specified for both bands, begin SAR measurement in U-NII-2A band by applying the OFDM SAR requirements. If the highest reported SAR for a test configuration is ≤ 1.2 W/kg, SAR is not required for U-NII-1 band for that configuration (802.11 mode and exposure condition); otherwise, each band is tested independently for SAR. 2)The largest channel bandwidth configuration is selected among the multiple configurations in a frequency band with the same maximum tune-up output power. 3) When multiple transmission modes (802.11a/g/n/ac) have the same maximum tune-up output power, largest channel bandwidth, lowest order modulation and lowest data rate, the lowest order 802.11 mode is selected; i.e., 802.11a is chosen over 802.11n then 802.11ac.						

8.2 Bluetooth

8.2.1 Bluetooth Output Power

Bluetooth-Full Power						
Test Mode	Modulation	Channel number	Frequency(MHz)	AV power (dBm)	Tune up (dBm))	SAR Test
BT	DH5	0	2402	11.77	13.00	Yes
		39	2441	11.99	13.00	Yes
		78	2480	11.56	13.00	Yes
	2DH5	0	2402	8.28	9.00	No
		39	2441	8.46	9.00	No
		78	2480	8.19	9.00	No
	3DH5	0	2402	8.24	9.00	No
		39	2441	8.45	9.00	No
		78	2480	8.14	9.00	No
	BLE-1M	0	2402	7.11	8.00	No
		19	2440	7.38	8.00	No
		39	2480	7.21	8.00	No
Note: Since bluetooth BR mode is the maximum output power mode, SAR measurements were performed with test software using DH5 modulation, and SAR measurement is not required for the EDR and LE. When the secondary mode is ≤ ¼ dB higher than the primary mode.						

8.2.2 Bluetooth Duty Cycle

The Bluetooth duty cycle is 77.08% as following figure, according to 2016 Oct. TCB workshop for Bluetooth SAR scaling need further consideration and the maximum duty cycle is 100%, therefore the actual duty cycle will be scaled up to 100% for Bluetooth reported SAR calculation.

