

8 CONDUCTED RF OUPUT POWER

8.1	WIFI Output Power
8.2	Bluetooth
8.2.1	Bluetooth Output Power
8.2.2	Bluetooth Duty Cycle

8.1 WIFI Output Power

WIFI2.4G-Ant.1						
2.4G	Mode	Channel	Frequency (MHz)	AV power (dBm)	Tune up (dBm)	SAR Test
	11b	1	2412	10.91	11.50	Yes
		6	2437	10.96	11.50	Yes
		11	2462	10.91	11.50	Yes
	11g	1	2412	11.00	11.50	No
		6	2437	10.83	11.50	No
		11	2462	11.00	11.50	No
	11n20	1	2412	10.96	11.50	No
		6	2437	10.96	11.50	No
		11	2462	11.00	11.50	No
	11ac20	1	2412	10.99	11.50	No
		6	2437	11.08	11.50	No
		11	2462	11.06	11.50	No
	11ax20	1	2412	11.00	11.50	No
		6	2437	11.00	11.50	No
		11	2462	11.00	11.50	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) 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.
- 3) According KDB 247228, when the highest reported SAR for DSSS is adjusted by the ratio of OFDM to DSSS specified maximum output power and the adjusted SAR is ≤ 1.2 W/kg, OFDM SAR test is not required

Adjusted SAR = $0.719 * (14.13\text{mW}/14.13\text{mW}) = 0.719$ W/Kg, so 2.4G OFDM SAR test is not required.

8.2 Bluetooth

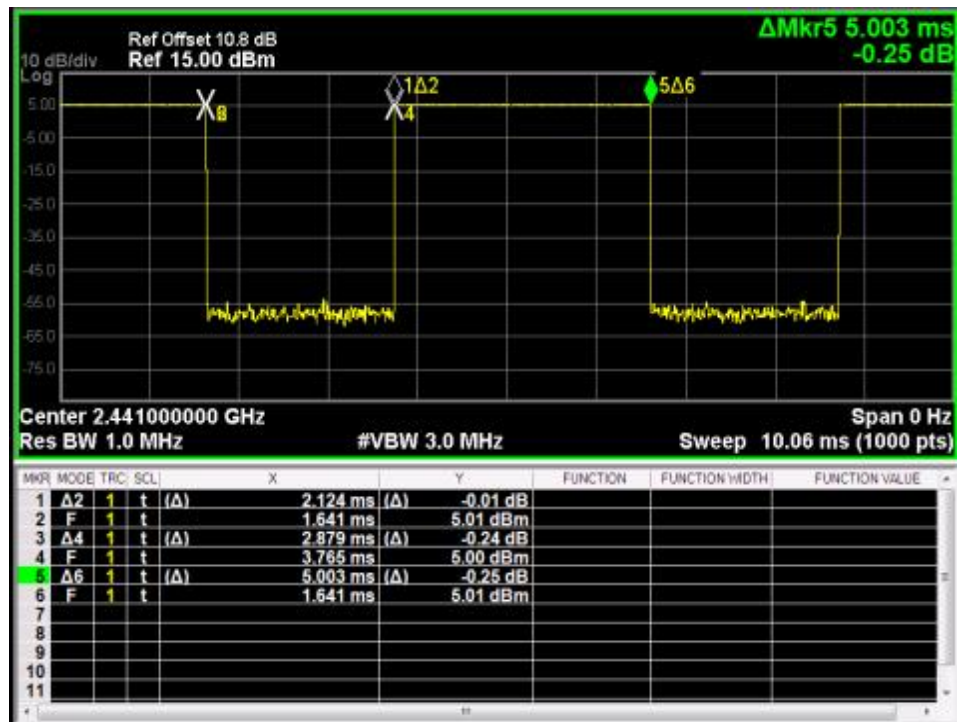
8.2.1 Bluetooth Output Power

Bluetooth-Ant.1						
Test Mode	Modulation	Channel number	Frequency(MHz)	AV power (dBm)	Tune up (dBm))	SAR Test
BT	DH5	0	2402	4.98	6.00	Yes
		39	2441	5.02	6.00	Yes
		78	2480	5.11	6.00	Yes
	2DH5	0	2402	3.75	5.00	No
		39	2441	3.77	5.00	No
		78	2480	3.82	5.00	No
	3DH5	0	2402	3.70	5.00	No
		39	2441	3.76	5.00	No
		78	2480	3.64	5.00	No
	BLE-1M	0	2402	8.59	9.00	Yes
		19	2440	8.52	9.00	Yes
		39	2480	8.54	9.00	Yes
	BLE-2M	1	2404	8.44	9.00	No
		19	2440	8.52	9.00	No
		38	2478	8.57	9.00	No

8.2.2 Bluetooth Duty Cycle

The Bluetooth DH5 duty cycle is 57.55% 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.

Duty Cycle



8.2.2 Bluetooth Duty Cycle

The Bluetooth BLE1M duty cycle is 62.42% 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.

Duty Cycle

