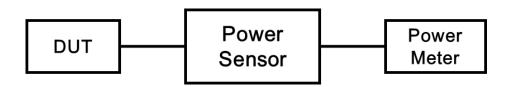


## **Appendix A - Conducted Power Measurements**

## **WLAN Conducted Power**

- 1. As per FCC OET KDB 248227 D01, conducted output power and SAR testing are not required for 802.11g/n20/n40/ax channels 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 ≤ 1.2W/kg.
- When the reported SAR of the initial test configuration is > 0.8 W/kg, SAR measurement is required for subsequent next highest
  measured output power channel(s) in the initial test configuration until reported SAR is ≤ 1.2 W/kg or all required channels are
  tested.
- 3. Additional conducted power measurement is required when reported SAR is > 1.2W/kg. In case the subsequent test configuration and the channel bandwidth is smaller than the initial test configuration, all channels that overlap with the larger channel bandwidth in the initial configuration should be tested.
- 4. The initial test configuration for 2.4 GHz and 5 GHz OFDM transmission modes is determined by the 802.11 configuration with the highest maximum output power specified for production units, including tune-up tolerance, in each standalone and aggregated frequency band. SAR for the initial test configuration is measured using the highest maximum output power channel determined by the default power measurement procedures. When multiple transmission modes (802.11a/g/n/ac/ax) have the same specified maximum output power, largest channel bandwidth, lowest order modulation and lowest data rate, lowest order 802.11 mode is selected (i.e. a, g, n, ac then ax)
- 5. When the highest reported SAR for the initial test configuration (when applicable, include subsequent highest output channels), according to the initial test position or fixed exposure requirements, is adjusted by the ratio of the subsequent test configuration to the initial test configuration specified maximum output power and the adjusted SAR is ≤1.2 W/Kg, SAR is not required for that subsequent test configuration.
- 6. For 802.11ax mode, maximum output powers for each RU size were measured to demonstrate that are no higher than other OFDM 802.11 modes.



Power Measurement Setup



WLAN 2.4 GHz							
			Main				
Mode	Channel	Frequency (MHz)	Average Power (dBm)	Tune-Up Limit (dBm)			
802.11b	1	2412	18.42	18.50			
	6	2437	18.33	18.50			
	11	2462	18.25	18.50			
802.11g	1	2412	17.40	17.50			
	6	2437	18.12	18.50			
	11	2462	15.62	16.00			
802.11n HT20	1	2412	16.54	17.50			
	6	2437	17.29	18.50			
	11	2462	15.53	16.00			
802.11n HT40	3	2422	15.91	17.00			
	6	2437	18.30	18.50			
	9	2452	14.60	15.50			



WLAN 5.2 GHz							
	Channel	Frequency (MHz)	Main				
Mode			Average Power (dBm)	Tune-Up Limit (dBm)			
802.11a	36	5180	14.22	15.00			
	40	5200	14.39	15.00			
	44	5220	14.35	15.00			
	48	5240	14.20	15.00			
802.11n HT20	36	5180	14.14	15.00			
	40	5200	14.27	15.00			
	44	5220	14.23	15.00			
	48	5240	14.10	15.00			
802.11n HT40	38	5190	14.39	15.00			
	46	5230	14.30	15.00			
802.11ac VHT20	36	5180	14.21	15.00			
	40	5200	14.34	15.00			
	44	5220	14.31	15.00			
	48	5240	14.13	15.00			
802.11ac VHT40	38	5190	14.44	15.00			
	46	5230	14.35	15.00			
802.11ac VHT80	42	5210	14.32	15.00			



WLAN 5.8 GHz							
	Channel	Frequency (MHz)	Main				
Mode			Average Power (dBm)	Tune-Up Limit (dBm)			
802.11a	149	5745	14.17	15.00			
	157	5785	14.31	15.00			
	165	5825	14.06	15.00			
802.11n HT20	149	5745	14.13	15.00			
	157	5785	14.10	15.00			
	165	5825	14.04	15.00			
802.11n HT40	151	5755	14.31	15.00			
	159	5795	14.40	15.00			
802.11ac VHT20	149	5745	14.23	15.00			
	157	5785	14.18	15.00			
	165	5825	14.15	15.00			
802.11ac VHT40	151	5755	14.40	15.00			
	159	5795	14.46	15.00			
802.11ac VHT80	155	5775	14.42	15.00			