

## 10 Conducted Power of WIFI and Bluetooth

### 10.1 Conducted Power of 2.4G WIFI

WIFI 2.4G Body(Receiver off) Standalone& Simultaneous transmission WWAN+WLAN2.4G/5G/2.4G+5G					
Mode	Channel	Frequency(MHz)	Data Rate(Mbps)	Average Power (dBm)	Tune up
802.11b	1	2412	1	18.64	20.00
	6	2437		18.81	20.00
	11	2462		18.91	20.00
802.11g	1	2412	6	17.28	19.00
	6	2437		17.54	19.00
	11	2462		15.68	17.00
802.11n HT20	1	2412	6.5	16.12	18.00
	6	2437		16.35	18.00
	11	2462		15.48	17.00
802.11n HT40	3	2422	13.5	14.39	16.00
	6	2437		16.51	17.00
	9	2452		12.77	14.00
802.11ac 20M	1	2412	MCS0	16.10	18.00
	6	2437		16.39	18.00
	11	2462		15.45	17.00
802.11ac 40M	3	2422	MCS0	14.35	16.00
	6	2437		16.48	17.00
	9	2452		12.78	14.00

WIFI 2.4G Head(Receiver on) Standalone&Simultaneous transmission WWAN+WLAN2.4G/5G/2.4G+5G					
Mode	Channel	Frequency(MHz)	Data Rate(Mbps)	Average Power (dBm)	Tune up
802.11b	1	2412	1	14.69	16.00
	6	2437		14.90	16.00
	11	2462		14.94	16.00
802.11g	1	2412	6	14.30	16.00
	6	2437		14.64	16.00
	11	2462		14.48	16.00
802.11n HT20	1	2412	6.5	14.15	16.00
	6	2437		14.51	16.00
	11	2462		14.31	16.00
802.11n HT40	3	2422	13.5	14.39	16.00
	6	2437		15.53	16.00
	9	2452		12.77	14.00
802.11ac 20M	1	2412	MCS0	14.14	16.00
	6	2437		14.53	16.00
	11	2462		14.32	16.00
802.11ac 40M	3	2422	MCS0	14.35	16.00
	6	2437		15.50	16.00
	9	2452		12.78	14.00

### 10.2 Conducted Power of 5G WIFI

WIFI 5G Body(Receiver off) Standalone							
5GHz	mode	Channel	Frequency(MHz)	Data Rate(Mbps)	Average Power (dBm)	Tune up	
802.11a	U-NII-1	36	5180	6	16.16	17.00	
		40	5200		17.98	19.00	
		44	5220		18.78	19.00	
		48	5240		18.74	19.00	
	U-NII-2A	52	5260		18.30	19.00	
		56	5280		18.07	19.00	
		60	5300		18.65	19.00	
		64	5320		18.28	19.00	
	U-NII-2C	100	5500		14.80	16.00	
		104	5520		15.62	17.00	
		108	5540		15.48	17.00	
		112	5560		16.08	17.00	
		116	5580		16.01	17.00	
		120	5600		16.04	17.00	
		124	5620		16.27	17.00	
		128	5640		16.37	17.00	
		132	5660		16.44	17.00	
		136	5680		16.48	17.00	
	U-NII-3	140	5700		13.52	14.00	
		144	5720		13.63	14.00	
		149	5745		15.23	16.00	
		153	5765		15.19	16.00	
		157	5785		15.01	16.00	
			161		5805	15.07	16.00
			165		5825	15.05	16.00
	5GHz	mode	Channel		Frequency(MHz)	Data Rate(Mbps)	Average Power (dBm)
802.11n-HT20	U-NII-1	36	5180	MCS0	15.45	16.50	
		40	5200		17.43	18.50	
		44	5220		17.87	18.50	
		48	5240		18.12	18.50	
	U-NII-2A	52	5260		17.52	18.50	
		56	5280		17.24	18.50	
		60	5300		17.83	18.50	
		64	5320		16.63	17.50	
	U-NII-2C	100	5500		14.86	16.00	
		104	5520		15.78	17.00	
		108	5540		15.56	17.00	
		112	5560		16.05	17.00	
		116	5580		16.05	17.00	
		120	5600		15.98	17.00	
		124	5620		16.23	17.00	
		128	5640		16.32	17.00	
		132	5660		16.34	17.00	
		136	5680		16.32	17.00	

		140	5700		12.91	13.50		
		144	5720		13.00	13.50		
	U-NII-3	149	5745		14.83	16.00		
		153	5765		14.81	16.00		
		157	5785		14.66	16.00		
		161	5805		14.77	16.00		
		165	5825		14.69	16.00		
5GHz	mode	Channel	Frequency(MHz)	Data Rate(Mbps)	Average Power (dBm)	Tune up		
802.11n-HT40	U-NII-1	38	5190	MCS0	11.60	12.00		
		46	5230		17.48	17.50		
	U-NII-2A	54	5270		16.84	17.50		
		62	5310		12.98	13.00		
	U-NII-2C	102	5510		11.25	12.00		
		110	5550		16.50	17.00		
		118	5590		16.34	17.00		
		126	5630		16.57	17.00		
		134	5670		15.63	16.00		
		142	5710		15.66	16.00		
	U-NII-3	151	5755		14.33	16.00		
		159	5795		15.08	16.00		
	5GHz	mode	Channel		Frequency(MHz)	Data Rate(Mbps)	Average Power (dBm)	Tune up
	802.11ac 20M	U-NII-1	36		5180	MCS0	15.43	16.50
40			5200	16.86	18.00			
44			5220	17.78	18.00			
48			5240	17.81	18.00			
U-NII-2A		52	5260	17.15	18.00			
		56	5280	16.88	18.00			
		60	5300	17.40	18.00			
		64	5320	16.76	17.50			
U-NII-2C		100	5500	14.73	16.00			
		104	5520	15.62	17.00			
		108	5540	15.52	17.00			
		112	5560	16.05	17.00			
		116	5580	15.93	17.00			
		120	5600	15.94	17.00			
		124	5620	16.12	17.00			
		128	5640	16.25	17.00			
		132	5660	16.28	17.00			
		136	5680	16.31	17.00			
U-NII-3		140	5700	12.86	13.50			
		144	5720	12.93	13.50			
		149	5745	14.73	16.00			
		153	5765	14.68	16.00			
		157	5785	14.41	16.00			
		161	5805	14.52	16.00			
165	5825	14.68	16.00					
5GHz	mode	Channel	Frequency(MHz)	Data Rate(Mbps)	Average Power (dBm)	Tune up		

802.11ac 40M	U-NII-1	38	5190	MCS0	11.53	12.00		
		46	5230		16.95	17.00		
	U-NII-2A	54	5270		16.46	17.00		
		62	5310		12.98	13.00		
	U-NII-2C	102	5510		11.20	12.00		
		110	5550		16.44	17.00		
		118	5590		16.33	17.00		
		126	5630		16.51	17.00		
		134	5670		15.46	16.00		
		142	5710		15.60	16.00		
	U-NII-3	151	5755		15.12	16.00		
		159	5795		14.78	16.00		
	5GHz	mode	Channel		Frequency(MHz)	Data Rate(Mbps)	Average Power (dBm)	Tune up
	802.11ac 80M	U-NII-1	42		5210	MCS0	11.45	11.50
U-NII-2A		58	5290	11.41	11.50			
U-NII-2C		106	5530	9.29	10.50			
		122	5610	14.60	15.50			
		138	5690	15.80	16.50			
U-NII-3		155	5775	13.37	14.50			

WIFI 5G Head(Receiver on) Standalone&Simultaneous transmission WWAN+WLAN2.4G/5G/2.4G+5G						
5GHz	mode	Channel	Frequency(MHz)	Data Rate(Mbps)	Average Power (dBm)	Tune up
802.11a	U-NII-1	36	5180	6	12.18	13.00
		40	5200		12.37	13.00
		44	5220		12.36	13.00
		48	5240		12.40	13.00
	U-NII-2A	52	5260		13.33	13.50
		56	5280		13.09	13.50
		60	5300		12.68	13.50
		64	5320		12.54	13.50
	U-NII-2C	100	5500		11.42	12.50
		104	5520		11.32	12.50
		108	5540		11.12	12.50
		112	5560		11.81	12.50
		116	5580		11.72	12.50
		120	5600		11.73	12.50
		124	5620		11.96	12.50
		128	5640		12.09	12.50
		132	5660		12.18	12.50
		136	5680		12.21	12.50
	U-NII-3	140	5700		12.30	12.50
		144	5720		12.37	12.50
		149	5745		12.86	13.50
		153	5765		12.74	13.50
		157	5785		12.67	13.50
		161	5805		12.85	13.50

5GHz	mode	165 Channel	5825 Frequency(MHz)	Data Rate(Mbps)	12.78 Average Power (dBm)	13.50 Tune up
802.11n- HT20	U-NII-1	36	5180	MCS0	12.00	13.00
		40	5200		12.19	13.00
		44	5220		12.94	13.00
		48	5240		12.97	13.00
	U-NII-2A	52	5260		12.96	13.50
		56	5280		12.71	13.50
		60	5300		13.22	13.50
		64	5320		13.07	13.50
	U-NII-2C	100	5500		11.32	12.50
		104	5520		11.22	12.50
		108	5540		11.04	12.50
		112	5560		11.69	12.50
		116	5580		11.67	12.50
		120	5600		11.59	12.50
		124	5620		11.73	12.50
		128	5640		11.86	12.50
		132	5660		11.86	12.50
		136	5680		11.92	12.50
	U-NII-3	140	5700		11.89	12.50
		144	5720		12.02	12.50
149		5745	12.43	13.50		
153		5765	12.35	13.50		
157		5785	12.03	13.50		
		161	5805	12.39	13.50	
		165	5825	12.46	13.50	
5GHz	mode	Channel	Frequency(MHz)	Data Rate(Mbps)	Average Power (dBm)	Tune up
802.11n- HT40	U-NII-1	38	5190	MCS0	11.60	12.00
		46	5230		12.33	13.00
	U-NII-2A	54	5270		13.35	13.50
		62	5310		12.98	13.00
	U-NII-2C	102	5510		11.25	12.00
		110	5550		11.76	12.50
		118	5590		11.72	12.50
		126	5630		12.14	12.50
		134	5670		12.05	12.50
		142	5710		12.18	12.50
	U-NII-3	151	5755		12.65	13.50
		159	5795		12.43	13.50
5GHz	mode	Channel	Frequency(MHz)	Data Rate(Mbps)	Average Power (dBm)	Tune up
802.11ac 20M	U-NII-1	36	5180	MCS0	11.73	13.00
		40	5200		12.01	13.00
		44	5220		12.94	13.00
		48	5240		12.95	13.00
	U-NII-2A	52	5260		12.93	13.50
		56	5280		12.54	13.50

	U-NII-2C	60	5300	MCS0	13.16	13.50
		64	5320		12.95	13.50
		100	5500		11.10	12.50
		104	5520		11.04	12.50
		108	5540		10.83	12.50
		112	5560		11.57	12.50
		116	5580		11.43	12.50
		120	5600		11.42	12.50
		124	5620		11.60	12.50
		128	5640		11.75	12.50
		132	5660		11.84	12.50
		136	5680		11.89	12.50
		140	5700		11.92	12.50
		144	5720		11.93	12.50
	U-NII-3	149	5745		12.26	13.50
		153	5765		12.10	13.50
157		5785	12.04	13.50		
161		5805	12.28	13.50		
165		5825	12.35	13.50		
5GHz	mode	Channel	Frequency(MHz)	Data Rate(Mbps)	Average Power (dBm)	Tune up
802.11ac 40M	U-NII-1	38	5190	MCS0	11.53	12.00
		46	5230		12.96	13.00
	U-NII-2A	54	5270		12.67	13.50
		62	5310		12.98	13.00
	U-NII-2C	102	5510		11.20	12.00
		110	5550		11.86	12.50
		118	5590		11.73	12.50
		126	5630		12.17	12.50
		134	5670		12.05	12.50
	U-NII-3	142	5710		12.22	12.50
151		5755	12.66	13.50		
159	5795	12.45	13.50			
5GHz	mode	Channel	Frequency(MHz)	Data Rate(Mbps)	Average Power (dBm)	Tune up
802.11ac 80M	U-NII-1	42	5210	MCS0	11.45	11.50
	U-NII-2A	58	5290		11.41	11.50
	U-NII-2C	106	5530		9.12	10.50
		122	5610		11.66	12.50
		138	5690		11.82	12.50
	U-NII-3	155	5775		12.65	13.50

WIFI 5G Body(Receiver off) Simultaneous transmission WWAN+WLAN2.4G/5G/2.4G+5G						
5GHz	mode	Channel	Frequency(MHz)	Data Rate(Mbps)	Average Power (dBm)	Tune up
802.11a	U-NII-1	36	5180	6	16.16	17.00
		40	5200		16.13	17.00
		44	5220		16.93	17.00
		48	5240		16.95	17.00
	U-NII-2A	52	5260		16.41	17.00
		56	5280		16.26	17.00
		60	5300		16.76	17.00
		64	5320		16.54	17.00
	U-NII-2C	100	5500		13.86	15.00
		104	5520		13.75	15.00
		108	5540		13.86	15.00
		112	5560		14.08	15.00
		116	5580		14.04	15.00
		120	5600		14.10	15.00
		124	5620		14.32	15.00
		128	5640		14.44	15.00
		132	5660		14.51	15.00
		136	5680		14.52	15.00
	U-NII-3	140	5700		13.48	14.00
		144	5720		13.61	14.00
		149	5745		15.23	16.00
		153	5765		15.19	16.00
		157	5785		15.01	16.00
			161		5805	15.07
		165	5825	15.05	16.00	
5GHz	mode	Channel	Frequency(MHz)	Data Rate(Mbps)	Average Power (dBm)	Tune up
802.11n- HT20	U-NII-1	36	5180	MCS0	15.45	16.50
		40	5200		15.81	17.00
		44	5220		16.70	17.00
		48	5240		16.70	17.00
	U-NII-2A	52	5260		16.15	17.00
		56	5280		15.93	17.00
		60	5300		16.38	17.00
		64	5320		16.02	17.00
	U-NII-2C	100	5500		13.75	15.00
		104	5520		13.63	15.00
		108	5540		13.51	15.00
		112	5560		14.00	15.00
		116	5580		14.03	15.00
		120	5600		14.01	15.00
		124	5620		14.16	15.00
		128	5640		14.22	15.00
		132	5660		14.27	15.00
		136	5680		14.23	15.00
		140	5700	12.91	13.50	

		144	5720		13.00	13.50
	U-NII-3	149	5745		14.83	16.00
		153	5765		14.81	16.00
		157	5785		14.66	16.00
		161	5805		14.77	16.00
		165	5825		14.69	16.00
5GHz	mode	Channel	Frequency(MHz)	Data Rate(Mbps)	Average Power (dBm)	Tune up
802.11n- HT40	U-NII-1	38	5190	MCS0	11.60	12.00
		46	5230		16.09	17.00
	U-NII-2A	54	5270		16.29	17.00
		62	5310		12.98	13.00
	U-NII-2C	102	5510		11.25	12.00
		110	5550		14.20	15.00
		118	5590		14.20	15.00
		126	5630		14.52	15.00
		134	5670		14.43	15.00
		142	5710		14.46	15.00
	U-NII-3	151	5755		14.33	16.00
		159	5795		15.08	16.00
	5GHz	mode	Channel		Frequency(MHz)	Data Rate(Mbps)
802.11ac 20M	U-NII-1	36	5180	MCS0	15.43	16.50
		40	5200		15.70	17.00
		44	5220		16.59	17.00
		48	5240		16.64	17.00
	U-NII-2A	52	5260		16.03	17.00
		56	5280		15.87	17.00
		60	5300		16.39	17.00
		64	5320		16.00	17.00
	U-NII-2C	100	5500		13.63	15.00
		104	5520		13.41	15.00
		108	5540		13.30	15.00
		112	5560		13.89	15.00
		116	5580		13.80	15.00
		120	5600		13.80	15.00
		124	5620		14.00	15.00
		128	5640		14.16	15.00
		132	5660		14.24	15.00
		136	5680		14.22	15.00
	U-NII-3	140	5700		12.86	13.50
		144	5720		12.93	13.50
		149	5745		14.73	16.00
		153	5765		14.68	16.00
		157	5785		14.41	16.00
		161	5805		14.52	16.00
		165	5825		14.68	16.00
5GHz	mode	Channel	Frequency(MHz)	Data Rate(Mbps)	Average Power (dBm)	Tune up
	U-NII-1	38	5190	MCS0	11.53	12.00



802.11ac 40M	U-NII-2A	46	5230		16.95	17.00
		54	5270		16.46	17.00
		62	5310		12.98	13.00
	U-NII-2C	102	5510		11.20	12.00
		110	5550		14.22	15.00
		118	5590		14.16	15.00
		126	5630		14.52	15.00
		134	5670		14.46	15.00
	U-NII-3	142	5710		14.43	15.00
		151	5755		15.12	16.00
			159		5795	14.78
5GHz	mode	Channel	Frequency(MHz)	Data Rate(Mbps)	Average Power (dBm)	Tune up
802.11ac 80M	U-NII-1	42	5210	MCS0	11.45	11.50
	U-NII-2A	58	5290		11.41	11.50
	U-NII-2C	106	5530		9.29	10.50
		122	5610		14.60	15.00
		138	5690		14.23	15.00
	U-NII-3	155	5775		13.37	14.50

### 10.3 Conducted Power of Bluetooth

BT Ant 22		Average Conducted Power(dBm)					
Band	Channel	0	Tune up	39	Tune up	78	Tune up
BT	GFSK	10.64	12.00	11.03	12.50	10.26	12.00
	$\pi/4$ DQPSK	7.51	10.50	8.10	10.50	7.39	10.00
	8DPSK	7.44	10.50	8.02	10.50	7.35	10.00
Band	Channel	0	Tune up	19	Tune up	39	Tune up
BLE 1M	GFSK	7.86	9.00	8.43	10.00	7.65	9.50
BLE 2M	GFSK	7.97	9.00	8.23	10.00	7.35	9.50