

8 Conducted Power of WIFI and Bluetooth

8.1 Conducted Power of 2.4G WIFI

WIFI 2.4G Receiver off & Standalone					
Mode	Channel	Frequency(MHz)	Data Rate(Mbps)	Average Power (dBm)	Tune up
802.11b	1	2412	1	19.13	20.00
	6	2437		19.36	20.00
	11	2462		19.11	20.00
802.11g	1	2412	6	17.02	18.00
	6	2437		17.27	18.00
	11	2462		17.00	18.00
802.11n HT20	1	2412	6.5	16.04	17.00
	6	2437		16.18	17.00
	11	2462		16.01	17.00
802.11n HT40	3	2422	13.5	14.51	15.00
	6	2437		14.62	15.00
	9	2452		14.23	15.00
802.11ac 20	1	2412	MCS0	16.06	17.00
	6	2437		16.19	17.00
	11	2462		16.02	17.00
802.11ac 40	3	2422	MCS0	14.49	15.00
	6	2437		14.56	15.00
	9	2452		14.26	15.00

WIFI 2.4G Receiver off 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	16.76	17.50
	6	2437		17.02	17.50
	11	2462		16.75	17.50
802.11g	1	2412	6	14.71	15.50
	6	2437		14.81	15.50
	11	2462		14.66	15.50
802.11n HT20	1	2412	6.5	13.54	14.50
	6	2437		13.74	14.50
	11	2462		13.58	14.50
802.11n HT40	3	2422	13.5	12.04	12.50
	6	2437		12.13	12.50
	9	2452		12.06	12.50
802.11ac 20	1	2412	MCS0	13.58	14.50
	6	2437		13.79	14.50
	11	2462		13.56	14.50
802.11ac 40	3	2422	MCS0	12.03	12.50
	6	2437		12.12	12.50
	9	2452		12.08	12.50

WIFI 2.4G 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	14.83	15.50
	6	2437		15.03	15.50
	11	2462		14.88	15.50
802.11g	1	2412	6	12.70	13.50
	6	2437		12.86	13.50
	11	2462		12.68	13.50
802.11n HT20	1	2412	6.5	11.61	12.50
	6	2437		11.83	12.50
	11	2462		11.63	12.50
802.11n HT40	3	2422	13.5	10.04	10.50
	6	2437		10.12	10.50
	9	2452		10.06	10.50
802.11ac 20	1	2412	MCS0	11.63	12.50
	6	2437		11.82	12.50
	11	2462		11.59	12.50
802.11ac 40	3	2422	MCS0	10.10	10.50
	6	2437		10.16	10.50
	9	2452		10.05	10.50

8.2 Conducted Power of 5G WIFI

WIFI 5G Receiver off & Standalone						
5GHz	mode	Channel	Frequency(MHz)	Data Rate(Mbps)	Average Power (dBm)	Tune up
802.11a	U-NII-1	36	5180	6	14.54	16.00
		40	5200		16.55	18.00
		44	5220		16.65	18.00
		48	5240		16.63	18.00
	U-NII-2A	52	5260		18.14	19.50
		56	5280		18.08	19.50
		60	5300		17.97	19.50
		64	5320		17.86	19.50
	U-NII-2C	100	5500		16.27	17.50
		104	5520		18.33	19.50
		108	5540		18.40	19.50
		112	5560		18.47	19.50
		116	5580		18.54	19.50
		132	5660		18.61	19.50
		136	5680		18.66	19.50
		140	5700		18.70	19.50
		144	5720		16.22	17.00
	U-NII-3	149	5745		15.29	16.50
		153	5765		15.32	16.50
		157	5785		15.39	16.50
		161	5805		15.40	16.50
		165	5825		15.36	16.50
5GHz	mode	Channel	Frequency(MHz)	Data Rate(Mbps)	Average Power (dBm)	Tune up
802.11n-HT20	U-NII-1	36	5180	MCS0	15.18	16.50
		40	5200		16.24	17.50
		44	5220		16.25	17.50
		48	5240		16.28	17.50
	U-NII-2A	52	5260		17.78	19.00
		56	5280		17.74	19.00
		60	5300		17.65	19.00
		64	5320		16.01	17.50
	U-NII-2C	100	5500		16.36	17.50
		104	5520		17.93	19.00
		108	5540		18.00	19.00
		112	5560		18.07	19.00
		116	5580		18.15	19.00
		132	5660		18.20	19.00
		136	5680		18.23	19.00
		140	5700		18.25	19.00
		144	5720		14.77	15.50
	U-NII-3	149	5745		14.73	16.00
		153	5765		14.75	16.00
		157	5785		14.86	16.00
		161	5805		14.89	16.00
		165	5825		14.85	16.00
5GHz	mode	Channel	Frequency(MHz)	Data Rate(Mbps)	Average Power (dBm)	Tune up
802.11n-HT40	U-NII-1	38	5190	MCS0	13.15	14.50
		46	5230		16.20	17.50
	U-NII-2A	54	5270		17.60	19.00
		62	5310		13.98	15.50
	U-NII-2C	102	5510		14.12	15.00
		110	5550		18.27	19.00
		134	5670		18.49	19.00

		142	5710		16.53	17.00
	U-NII-3	151	5755		14.66	16.00
		159	5795		14.71	16.00
5GHz	mode	Channel	Frequency(MHz)	Data Rate(Mbps)	Average Power (dBm)	Tune up
802.11ac-20	U-NII-1	36	5180	MCS0	15.26	16.50
		40	5200		15.83	17.00
		44	5220		15.80	17.00
		48	5240		15.84	17.00
	U-NII-2A	52	5260		17.37	18.50
		56	5280		17.32	18.50
		60	5300		17.19	18.50
		64	5320		16.04	17.50
	U-NII-2C	100	5500		16.49	17.50
		104	5520		17.52	18.50
		108	5540		17.58	18.50
		112	5560		17.74	18.50
		116	5580		17.76	18.50
		132	5660		17.81	18.50
		136	5680		17.83	18.50
		140	5700		17.88	18.50
		144	5720		14.90	15.50
	U-NII-3	149	5745		14.34	15.50
		153	5765		14.41	15.50
		157	5785		14.43	15.50
		161	5805		14.42	15.50
		165	5825		14.48	15.50
5GHz	mode	Channel	Frequency(MHz)	Data Rate(Mbps)	Average Power (dBm)	Tune up
802.11ac-40	U-NII-1	38	5190	MCS0	13.24	14.50
		46	5230		15.26	16.50
	U-NII-2A	54	5270		16.77	18.00
		62	5310		14.10	15.50
	U-NII-2C	102	5510		14.15	15.00
		110	5550		17.29	18.00
		134	5670		17.45	18.00
		142	5710		16.50	17.00
	U-NII-3	151	5755		13.78	15.00
		159	5795		13.83	15.00
5GHz	mode	Channel	Frequency(MHz)	Data Rate(Mbps)	Average Power (dBm)	Tune up
802.11ac 80M	U-NII-1	42	5210	MCS0	12.72	14.00
	U-NII-2A	58	5290		12.16	13.50
	U-NII-2C	106	5530		13.16	14.00
		138	5690		15.30	16.00
	U-NII-3	155	5775		11.60	13.00

WIFI 5G 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	13.20	14.00
		40	5200		15.26	16.00
		44	5220		15.32	16.00
		48	5240		15.35	16.00
	U-NII-2A	52	5260		15.43	16.00
		56	5280		15.30	16.00
		60	5300		15.33	16.00
		64	5320		13.66	14.50
	U-NII-2C	100	5500		12.25	12.50
		104	5520		14.24	14.50
		108	5540		14.31	14.50
		112	5560		14.36	14.50
		116	5580		14.47	14.50
		132	5660		14.44	14.50
		136	5680		14.46	14.50
		140	5700		14.50	14.50
	U-NII-3	144	5720		11.96	12.00
		149	5745		13.60	14.50
		153	5765		13.65	14.50
		157	5785		13.63	14.50
		161	5805		13.74	14.50
		165	5825		13.71	14.50
5GHz	mode	Channel	Frequency(MHz)	Data Rate(Mbps)	Average Power (dBm)	Tune up
802.11n- HT20	U-NII-1	36	5180	MCS0	13.68	14.50
		40	5200		14.77	15.50
		44	5220		14.83	15.50
		48	5240		14.80	15.50
	U-NII-2A	52	5260		14.82	15.50
		56	5280		14.84	15.50
		60	5300		14.71	15.50
		64	5320		13.13	14.00
	U-NII-2C	100	5500		12.07	12.50
		104	5520		13.59	14.00
		108	5540		13.68	14.00
		112	5560		13.77	14.00
		116	5580		13.83	14.00
		132	5660		13.80	14.00
		136	5680		13.84	14.00
		140	5700		13.86	14.00
	U-NII-3	144	5720		10.32	10.50
		149	5745		12.93	14.00
		153	5765		12.92	14.00
		157	5785		12.94	14.00
		161	5805		13.10	14.00
		165	5825		13.08	14.00
5GHz	mode	Channel	Frequency(MHz)	Data Rate(Mbps)	Average Power (dBm)	Tune up
802.11n- HT40	U-NII-1	38	5190	MCS0	11.59	12.50
		46	5230		14.62	15.50
	U-NII-2A	54	5270		14.57	15.50
		62	5310		10.96	12.00
	U-NII-2C	102	5510		9.50	10.00
		110	5550		13.60	14.00

		134	5670		13.80	14.00
		142	5710		11.82	12.00
	U-NII-3	151	5755		13.02	14.00
		159	5795		12.93	14.00
5GHz	mode	Channel	Frequency(MHz)	Data Rate(Mbps)	Average Power (dBm)	Tune up
802.11ac-20	U-NII-1	36	5180	MCS0	13.76	14.50
		40	5200		14.29	15.00
		44	5220		14.34	15.00
		48	5240		14.38	15.00
	U-NII-2A	52	5260		14.38	15.00
		56	5280		14.27	15.00
		60	5300		14.21	15.00
		64	5320		13.05	14.00
	U-NII-2C	100	5500		12.03	12.50
		104	5520		13.06	13.50
		108	5540		13.18	13.50
		112	5560		13.23	13.50
		116	5580		13.28	13.50
		132	5660		13.32	13.50
		136	5680		13.43	13.50
		140	5700		13.45	13.50
		144	5720		10.38	10.50
	U-NII-3	149	5745		12.36	13.50
		153	5765		12.47	13.50
		157	5785		12.51	13.50
		161	5805		12.57	13.50
		165	5825		12.61	13.50
5GHz	mode	Channel	Frequency(MHz)	Data Rate(Mbps)	Average Power (dBm)	Tune up
802.11ac-40	U-NII-1	38	5190	MCS0	11.69	12.50
		46	5230		13.66	14.50
	U-NII-2A	54	5270		13.67	14.50
		62	5310		11.03	12.00
	U-NII-2C	102	5510		9.52	10.00
		110	5550		12.62	13.00
		134	5670		12.76	13.00
		142	5710		11.81	12.00
	U-NII-3	151	5755		11.93	13.00
		159	5795		11.97	13.00
5GHz	mode	Channel	Frequency(MHz)	Data Rate(Mbps)	Average Power (dBm)	Tune up
802.11ac 80M	U-NII-1	42	5210	MCS0	10.89	12.00
	U-NII-2A	58	5290		8.83	10.00
	U-NII-2C	106	5530		8.13	9.00
		138	5690		10.47	11.00
	U-NII-3	155	5775		9.54	11.00

WIFI 5G 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	8.78	9.50
		40	5200		10.95	11.50
		44	5220		10.99	11.50
		48	5240		10.93	11.50
	U-NII-2A	52	5260		10.98	11.50
		56	5280		10.95	11.50
		60	5300		10.95	11.50
		64	5320		9.30	10.00
	U-NII-2C	100	5500		9.56	10.00
		104	5520		11.58	12.00
		108	5540		11.55	12.00
		112	5560		11.62	12.00
		116	5580		11.68	12.00
		132	5660		11.71	12.00
		136	5680		11.72	12.00
		140	5700		11.68	12.00
		144	5720		9.27	9.50
	U-NII-3	149	5745		12.48	13.50
		153	5765		12.60	13.50
		157	5785		12.64	13.50
		161	5805		12.62	13.50
		165	5825		12.71	13.50
5GHz	mode	Channel	Frequency(MHz)	Data Rate(Mbps)	Average Power (dBm)	Tune up
802.11n-HT20	U-NII-1	36	5180	MCS0	9.24	10.00
		40	5200		10.28	11.00
		44	5220		10.37	11.00
		48	5240		10.36	11.00
	U-NII-2A	52	5260		10.34	11.00
		56	5280		10.28	11.00
		60	5300		10.29	11.00
		64	5320		8.61	9.50
	U-NII-2C	100	5500		9.59	10.00
		104	5520		11.18	11.50
		108	5540		11.27	11.50
		112	5560		11.30	11.50
		116	5580		11.33	11.50
		132	5660		11.31	11.50
		136	5680		11.38	11.50
		140	5700		11.42	11.50
		144	5720		7.84	8.00
	U-NII-3	149	5745		11.81	13.00
		153	5765		11.86	13.00
		157	5785		11.94	13.00
		161	5805		12.00	13.00
		165	5825		12.06	13.00
5GHz	mode	Channel	Frequency(MHz)	Data Rate(Mbps)	Average Power (dBm)	Tune up
802.11n-HT40	U-NII-1	38	5190	MCS0	7.13	8.00
		46	5230		10.67	11.00
	U-NII-2A	54	5270		10.18	11.00
		62	5310		7.00	7.50
	U-NII-2C	102	5510		6.97	7.50
		110	5550		11.14	11.50

		134	5670		11.25	11.50
		142	5710		9.33	9.50
	U-NII-3	151	5755		11.84	13.00
		159	5795		11.93	13.00
5GHz	mode	Channel	Frequency(MHz)	Data Rate(Mbps)	Average Power (dBm)	Tune up
802.11ac-20	U-NII-1	36	5180	MCS0	9.21	10.00
		40	5200		9.72	10.50
		44	5220		9.77	10.50
		48	5240		9.88	10.50
	U-NII-2A	52	5260		9.83	10.50
		56	5280		9.84	10.50
		60	5300		9.77	10.50
		64	5320		8.70	9.50
	U-NII-2C	100	5500		9.54	10.00
		104	5520		10.50	11.00
		108	5540		10.62	11.00
		112	5560		10.70	11.00
		116	5580		10.83	11.00
		132	5660		10.87	11.00
		136	5680		10.83	11.00
		140	5700		10.93	11.00
		144	5720		7.82	8.00
	U-NII-3	149	5745		11.42	12.50
		153	5765		11.49	12.50
		157	5785		11.52	12.50
		161	5805		11.58	12.50
		165	5825		11.62	12.50
5GHz	mode	Channel	Frequency(MHz)	Data Rate(Mbps)	Average Power (dBm)	Tune up
802.11ac-40	U-NII-1	38	5190	MCS0	7.17	8.00
		46	5230		9.20	10.00
	U-NII-2A	54	5270		9.19	10.00
		62	5310		6.53	7.50
	U-NII-2C	102	5510		6.93	7.50
		110	5550		10.16	10.50
		134	5670		10.26	10.50
		142	5710		9.41	9.50
	U-NII-3	151	5755		10.93	12.00
		159	5795		10.95	12.00
5GHz	mode	Channel	Frequency(MHz)	Data Rate(Mbps)	Average Power (dBm)	Tune up
802.11ac 80M	U-NII-1	42	5210	MCS0	6.32	7.50
	U-NII-2A	58	5290		4.29	5.50
	U-NII-2C	106	5530		5.79	6.50
		138	5690		7.93	8.50
	U-NII-3	155	5775		8.55	10.00

8.3 Conducted Power of Bluetooth

BT (Ant 22)		Average Conducted Power(dBm)			
Band	Channel	0	39	78	Tune up
BT	GFSK	9.35	9.41	9.85	10.00
	$\pi/4$ DQPSK	6.37	6.22	6.81	7.00
	8DPSK	6.47	6.28	6.87	7.00
Band	Channel	0	19	39	Tune up
BLE 1M	GFSK	5.28	5.83	5.44	7.00
BLE 2M	GFSK	5.01	5.56	5.17	7.00