

FCC ID: 2AKCT- SPCP2

Maximum Permissible Exposure (MPE)

According to FCC 1.1310: The criteria listed in the following table shall be used to evaluate the environment impact of human exposure to radio frequency(RF) Radiation as specified in §1.1307(b)

Limits for Maximum Permissible Exposure (MPE)

Frequency range (MHz)	Electric field strength (V/m)	Magnetic field strength (A/m)	Power density (mW/cm ²)	Averaging time (minutes)
(A) Limits for Occupational/Controlled Exposure				
0.3-3.0	614	1.63	*100	6
3.0-30	1842/f	4.89/f	*900/f ²	6
30-300	61.4	0.163	1.0	6
300-1,500			f/300	6
1,500-100,000			5	6
(B) Limits for General Population/Uncontrolled Exposure				
0.3-1.34	614	1.63	*100	30
1.34-30	824/f	2.19/f	*180/f ²	30
30-300	27.5	0.073	0.2	30
300-1,500			f/1500	30
1,500-100,000			1.0	30

f = frequency in MHz * = Plane-wave equivalent power density

MPE Calculation Method

$$E \text{ (V/m)} = \frac{\sqrt{30 * P * G}}{d} \qquad \text{Power Density: } Pd \text{ (W/m}^2\text{)} = \frac{E^2}{377}$$

E = Electric field (V/m)

P = Average RF output power (W)

G = EUT Antenna numeric gain (numeric)

d = Separation distance between radiator and human body (m)

The formula can be changed to

$$Pd = \frac{30 * P * G}{377 * D^2}$$

From the EUT RF output power, the minimum mobile separation distance, d=0.2m, as well as the gain of the used antenna, the RF power density can be obtained.

BT:

Measurement Result

Operation Frequency: 2402MHz~2480MHz

Power density limited: $1\text{mW}/\text{cm}^2$

Antenna Type: External Antenna

antenna gain: 5 dBi;

R=20cm

$\text{mW}=10^{(\text{dBm}/10)}$

antenna gain Numeric= $10^{(\text{dBi}/10)}=10^{(5/10)}=3.16$

Channel Freq. (MHz)	modulation	conducted power	Tune-up power (dBm)	Max		Antenna		Evaluation result	Power density
		(dBm)		tune-up power		Gain			
				(dBm)	(mW)	(dBi)	Numeric	(mW/cm2)	(mW/cm2)
2402	DH5	3.713	3±1	4	2.512	5.00	3.16	0.0016	1
2441		4.974	4±1	5	3.162	5.00	3.16	0.0020	1
2480		4.128	4±1	5	3.162	5.00	3.16	0.0020	1
2402	2DH5	7.798	8±1	9	7.943	5.00	3.16	0.0050	1
2441		8.008	9±1	10	10.000	5.00	3.16	0.0063	1
2480		9.734	9±1	10	10.000	5.00	3.16	0.0063	1
2402	3DH5	8.185	8±1	9	7.943	5.00	3.16	0.0050	1
2441		9.783	9±1	10	10.000	5.00	3.16	0.0063	1
2480		9.798	9±1	10	10.000	5.00	3.16	0.0063	1

Channel Freq. (MHz)	modulation	conducted power	Tune-up power (dBm)	Max		Antenna		Evaluation result	Power density
		(dBm)		tune-up power		Gain			
				(dBm)	(dBm)	(mW)	(dBi)	Numeric	(mW/cm2)
2402	GFSK(1M)	4.046	5±1	6	3.981	5.00	3.16	0.0025	1
2440		5.483	5±1	6	3.981	5.00	3.16	0.0025	1
2480		4.531	5±1	6	3.981	5.00	3.16	0.0025	1
2402	GFSK(2M)	4.208	5±1	6	3.981	5.00	3.16	0.0025	1
2440		5.718	5±1	6	3.981	5.00	3.16	0.0025	1
2480		4.754	5±1	6	3.981	5.00	3.16	0.0025	1

2.4G WIFI:

Operation Frequency: WIFI 802.11b/g/n20/ax20: 2412-2462MHz,

Power density limited: $1\text{mW}/\text{cm}^2$

Antenna Type: External Antenna

antenna gain: 5 dBi;

R=20cm

$\text{mW}=10^{(\text{dBm}/10)}$

antenna gain Numeric= $10^{(\text{dBi}/10)}=10^{(5/10)}=3.16$

Antenna	Channel Freq. (MHz)	modulation	conducted power	Tune-up power (dBm)	Max		Antenna		Evaluation result	Power density
			(dBm)		tune-up power		Gain		(mW/cm2)	(mW/cm2)
					(dBm)	(mW)	(dBi)	Numeric		
Ant 1	2412	802.11ax20	12.3	12±1	13	19.953	5.00	3.16	0.0126	1
Ant 1	2437		11.22	12±1	13	19.953	5.00	3.16	0.0126	1
Ant 1	2462		12.42	12±1	13	19.953	5.00	3.16	0.0126	1
Ant 2	2412	802.11ax20	12.12	12±1	13	19.953	5.00	3.16	0.0126	1
Ant 2	2437		12.06	12±1	13	19.953	5.00	3.16	0.0126	1
Ant 2	2462		12.3	12±1	13	19.953	5.00	3.16	0.0126	1
Ant 1	2412	802.11b	12.8	13±1	14	25.119	5.00	3.16	0.0158	1
Ant 1	2437		13.73	14±1	15	31.623	5.00	3.16	0.0199	1
Ant 1	2462		13.09	14±1	15	31.623	5.00	3.16	0.0199	1
Ant 2	2412	802.11b	12.75	13±1	14	25.119	5.00	3.16	0.0158	1
Ant 2	2437		14.21	14±1	15	31.623	5.00	3.16	0.0199	1
Ant 2	2462		13.14	14±1	15	31.623	5.00	3.16	0.0199	1
Ant 1	2412	802.11g	12.4	12±1	13	19.953	5.00	3.16	0.0126	1
Ant 1	2437		12.42	12±1	13	19.953	5.00	3.16	0.0126	1
Ant 1	2456		12.56	12±1	13	19.953	5.00	3.16	0.0126	1
Ant 2	2412	802.11g	12.11	12±1	13	19.953	5.00	3.16	0.0126	1
Ant 2	2437		12.33	12±1	13	19.953	5.00	3.16	0.0126	1
Ant 2	2456		12.59	12±1	13	19.953	5.00	3.16	0.0126	1
Ant 1	2412	802.11n H20	12.41	12±1	13	19.953	5.00	3.16	0.0126	1
Ant 1	2437		11.56	12±1	13	19.953	5.00	3.16	0.0126	1
Ant 1	2462		12.53	12±1	13	19.953	5.00	3.16	0.0126	1
Ant 2	2412	802.11n H20	12.32	12±1	13	19.953	5.00	3.16	0.0126	1
Ant 2	2437		12.14	12±1	13	19.953	5.00	3.16	0.0126	1
Ant 2	2462		12.64	12±1	13	19.953	5.00	3.16	0.0126	1

5G WIFI:

Operation Frequency: WIFI 802.11a/ac/n(HT20): 5180-5240MHz;5260-5320MHz,5500-5700MHz,5745-5825MHz;\WIFI 802.11ac/n(HT40): 5190-5230MHz;5270-5310MHz,5510-5670MHz5755-5795MHz; WIFI 802.11ac80:5210-5210MHz;5290-5290MHz;5530-5610MHz; 5775-5775MHz

Power density limited: 1mW/cm

Antenna Type: External Antenna

antenna gain:5dBi;

R=20cm

$mW=10^{(dBm/10)}$

antenna gain Numeric= $10^{(dBi/10)}=10^{(5/10)}=3.16$

5.2G

Antenna	Channel Freq. (MHz)	modulation	conducted power	Tune-up power (dBm)	Max		Antenna		Evaluation result	Power density Limits
			(dBm)		tune-up power		Gain			
					(dBm)	(mW)	(dBi)	Numeric	(mW/cm2)	(mW/cm2)
Ant 1	5180	802.11a	9.437	10±1	11	12.589	5.00	3.16	0.0079	1
Ant 1	5200		9.514	10±1	11	12.589	5.00	3.16	0.0079	1
Ant 1	5240		10.014	10±1	11	12.589	5.00	3.16	0.0079	1
Ant 2	5180	802.11a	9.737	10±1	11	12.589	5.00	3.16	0.0079	1
Ant 2	5200		9.712	10±1	11	12.589	5.00	3.16	0.0079	1
Ant 2	5240		9.735	10±1	11	12.589	5.00	3.16	0.0079	1
Ant 1	5180	802.11ac20	9.042	9±1	10	10.000	5.00	3.16	0.0063	1
Ant 1	5200		9.163	9±1	10	10.000	5.00	3.16	0.0063	1
Ant 1	5240		9.274	9±1	10	10.000	5.00	3.16	0.0063	1
Ant 2	5180	802.11ac20	9.218	9±1	10	10.000	5.00	3.16	0.0063	1
Ant 2	5200		9.262	9±1	10	10.000	5.00	3.16	0.0063	1
Ant 2	5240		9.483	9±1	10	10.000	5.00	3.16	0.0063	1
Ant 1	5190	802.11ac40	8.57	9±1	10	10.000	5.00	3.16	0.0063	1
Ant 1	5230		9.062	9±1	10	10.000	5.00	3.16	0.0063	1
Ant 2	5190	802.11ac40	8.786	9±1	10	10.000	5.00	3.16	0.0063	1
Ant 2	5230		9.086	9±1	10	10.000	5.00	3.16	0.0063	1
Ant 1	5210	802.11ac80	8.551	8±1	9	7.943	5.00	3.16	0.0050	1
Ant 2	5210	802.11ac80	8.794	8±1	9	7.943	5.00	3.16	0.0050	1
Ant 1	5180	802.11ax20	8.879	9±1	10	10.000	5.00	3.16	0.0063	1
Ant 1	5200		8.554	9±1	10	10.000	5.00	3.16	0.0063	1
Ant 1	5240		8.663	9±1	10	10.000	5.00	3.16	0.0063	1
Ant 2	5180	802.11ax20	9.431	9±1	10	10.000	5.00	3.16	0.0063	1
Ant 2	5200		9.447	9±1	10	10.000	5.00	3.16	0.0063	1
Ant 2	5240		9.741	9±1	10	10.000	5.00	3.16	0.0063	1
Ant 1	5190	802.11ax40	7.416	7±1	8	6.310	5.00	3.16	0.0040	1
Ant 1	5230		7.549	7±1	8	6.310	5.00	3.16	0.0040	1
Ant 2	5190	802.11ax40	8.761	8±1	9	7.943	5.00	3.16	0.0050	1
Ant 2	5230		8.877	8±1	9	7.943	5.00	3.16	0.0050	1
Ant 1	5210	802.11ax80	8.62	8±1	9	7.943	5.00	3.16	0.0050	1
Ant 2	5210	802.11ax80	8.164	8±1	9	7.943	5.00	3.16	0.0050	1
Ant 1	5180	802.11n H20	8.828	9±1	10	10.000	5.00	3.16	0.0063	1
Ant 1	5200		9.138	9±1	10	10.000	5.00	3.16	0.0063	1
Ant 1	5240		9.425	9±1	10	10.000	5.00	3.16	0.0063	1
Ant 2	5180	802.11n H20	9.471	9±1	10	10.000	5.00	3.16	0.0063	1
Ant 2	5200		9.301	9±1	10	10.000	5.00	3.16	0.0063	1
Ant 2	5240		9.519	9±1	10	10.000	5.00	3.16	0.0063	1
Ant 1	5190	802.11n H40	8.549	9±1	10	10.000	5.00	3.16	0.0063	1
Ant 1	5230		8.994	9±1	10	10.000	5.00	3.16	0.0063	1
Ant 2	5190	802.11n H40	8.914	9±1	10	10.000	5.00	3.16	0.0063	1
Ant 2	5230		9.116	9±1	10	10.000	5.00	3.16	0.0063	1

5.3G

Antenna	Channel Freq. (MHz)	modulation	conducted power	Tune-up power (dBm)	Max		Antenna		Evaluation result (mW/cm2)	Power density Limits (mW/cm2)
			(dBm)		tune-up pow er		Gain			
					(dBm)	(mW)	(dBi)	Numeric		
Ant 1	5260	802.11a	10.139	10±1	11	12.589	5.00	3.16	0.0079	1
Ant 1	5280		10.159	10±1	11	12.589	5.00	3.16	0.0079	1
Ant 1	5320		9.758	10±1	11	12.589	5.00	3.16	0.0079	1
Ant 2	5260	802.11a	10.512	10±1	11	12.589	5.00	3.16	0.0079	1
Ant 2	5280		10.636	10±1	11	12.589	5.00	3.16	0.0079	1
Ant 2	5320		9.931	10±1	11	12.589	5.00	3.16	0.0079	1
Ant 1	5260	802.11ac20	8.839	9±1	10	10.000	5.00	3.16	0.0063	1
Ant 1	5280		8.855	9±1	10	10.000	5.00	3.16	0.0063	1
Ant 1	5320		8.353	9±1	10	10.000	5.00	3.16	0.0063	1
Ant 2	5260	802.11ac20	9.591	9±1	10	10.000	5.00	3.16	0.0063	1
Ant 2	5280		9.508	9±1	10	10.000	5.00	3.16	0.0063	1
Ant 2	5320		8.826	9±1	10	10.000	5.00	3.16	0.0063	1
Ant 1	5270	802.11ac40	8.216	8±1	9	7.943	5.00	3.16	0.0050	1
Ant 1	5310		7.787	8±1	9	7.943	5.00	3.16	0.0050	1
Ant 2	5270	802.11ac40	8.79	8±1	9	7.943	5.00	3.16	0.0050	1
Ant 2	5310		8.215	8±1	9	7.943	5.00	3.16	0.0050	1
Ant 1	5290	802.11ac80	7.623	8±1	9	7.943	5.00	3.16	0.0050	1
Ant 2	5290	802.11ac80	8.485	8±1	9	7.943	5.00	3.16	0.0050	1
Ant 1	5260	802.11ax20	8.279	9±1	10	10.000	5.00	3.16	0.0063	1
Ant 1	5280		8.213	9±1	10	10.000	5.00	3.16	0.0063	1
Ant 1	5320		8.017	9±1	10	10.000	5.00	3.16	0.0063	1
Ant 2	5260	802.11ax20	9.628	9±1	10	10.000	5.00	3.16	0.0063	1
Ant 2	5280		9.494	9±1	10	10.000	5.00	3.16	0.0063	1
Ant 2	5320		8.886	9±1	10	10.000	5.00	3.16	0.0063	1
Ant 1	5270	802.11ax40	7.081	7±1	8	6.310	5.00	3.16	0.0040	1
Ant 1	5310		7.717	7±1	8	6.310	5.00	3.16	0.0040	1
Ant 2	5270	802.11ax40	9.006	9±1	10	10.000	5.00	3.16	0.0063	1
Ant 2	5310		8.218	9±1	10	10.000	5.00	3.16	0.0063	1
Ant 1	5290	802.11ax80	8.706	9±1	10	10.000	5.00	3.16	0.0063	1
Ant 2	5290	802.11ax80	9.08	9±1	10	10.000	5.00	3.16	0.0063	1
Ant 1	5260	802.11n H20	8.91	8±1	9	7.943	5.00	3.16	0.0050	1
Ant 1	5280		8.851	8±1	9	7.943	5.00	3.16	0.0050	1
Ant 1	5320		8.456	8±1	9	7.943	5.00	3.16	0.0050	1
Ant 2	5260	802.11n H20	9.431	9±1	10	10.000	5.00	3.16	0.0063	1
Ant 2	5280		9.472	9±1	10	10.000	5.00	3.16	0.0063	1
Ant 2	5320		8.703	9±1	10	10.000	5.00	3.16	0.0063	1
Ant 1	5270	802.11n H40	8.24	8±1	9	7.943	5.00	3.16	0.0050	1
Ant 1	5310		7.75	8±1	9	7.943	5.00	3.16	0.0050	1
Ant 2	5270	802.11n H40	8.839	8±1	9	7.943	5.00	3.16	0.0050	1
Ant 2	5310		8.269	8±1	9	7.943	5.00	3.16	0.0050	1

5.6G

Antenna	Channel Freq. (MHz)	modulation	conducted power	Tune-up pow er (dBm)	Max		Antenna		Evaluation result	Pow er density Limits
			(dBm)		tune-up pow er		Gain			
					(dBm)	(mW)	(dBi)	Numeric	(mW/cm2)	(mW/cm2)
Ant1	5500	802.11a	10.245	10±1	11	12.589	5.00	3.16	0.0079	1
Ant1	5600		9.557	10±1	11	12.589	5.00	3.16	0.0079	1
Ant1	5700		9.585	10±1	11	12.589	5.00	3.16	0.0079	1
Ant2	5500	802.11a	9.939	10±1	11	12.589	5.00	3.16	0.0079	1
Ant2	5600		10.899	10±1	11	12.589	5.00	3.16	0.0079	1
Ant2	5700		10.208	10±1	11	12.589	5.00	3.16	0.0079	1
Ant1	5500	802.11ac20	9.194	9±1	10	10.000	5.00	3.16	0.0063	1
Ant1	5600		8.472	9±1	10	10.000	5.00	3.16	0.0063	1
Ant1	5700		9.18	9±1	10	10.000	5.00	3.16	0.0063	1
Ant2	5500	802.11ac20	8.976	9±1	10	10.000	5.00	3.16	0.0063	1
Ant2	5600		9.707	9±1	10	10.000	5.00	3.16	0.0063	1
Ant2	5700		9.078	9±1	10	10.000	5.00	3.16	0.0063	1
Ant1	5510	802.11ac40	8.277	8±1	9	7.943	5.00	3.16	0.0050	1
Ant1	5590		7.757	8±1	9	7.943	5.00	3.16	0.0050	1
Ant1	5670		7.858	8±1	9	7.943	5.00	3.16	0.0050	1
Ant2	5510	802.11ac40	8.523	9±1	10	10.000	5.00	3.16	0.0063	1
Ant2	5590		9.052	9±1	10	10.000	5.00	3.16	0.0063	1
Ant2	5670		9.13	9±1	10	10.000	5.00	3.16	0.0063	1
Ant1	5530	802.11ax80	8.352	8±1	9	7.943	5.00	3.16	0.0050	1
Ant1	5610		8.071	8±1	9	7.943	5.00	3.16	0.0050	1
Ant2	5530	802.11ax80	8.424	9±1	10	10.000	5.00	3.16	0.0063	1
Ant2	5610		9.148	9±1	10	10.000	5.00	3.16	0.0063	1
Ant1	5500	802.11ax20	9.171	9±1	10	10.000	5.00	3.16	0.0063	1
Ant1	5600		8.432	9±1	10	10.000	5.00	3.16	0.0063	1
Ant1	5700		8.848	9±1	10	10.000	5.00	3.16	0.0063	1
Ant2	5500	802.11ax20	9.008	9±1	10	10.000	5.00	3.16	0.0063	1
Ant2	5600		9.621	9±1	10	10.000	5.00	3.16	0.0063	1
Ant2	5700		9.001	9±1	10	10.000	5.00	3.16	0.0063	1
Ant1	5510	802.11ax40	8.275	8±1	9	7.943	5.00	3.16	0.0050	1
Ant1	5590		8.106	8±1	9	7.943	5.00	3.16	0.0050	1
Ant1	5670		7.983	8±1	9	7.943	5.00	3.16	0.0050	1
Ant2	5510	802.11ax40	8.442	9±1	10	10.000	5.00	3.16	0.0063	1
Ant2	5590		9.022	9±1	10	10.000	5.00	3.16	0.0063	1
Ant2	5670		9.083	9±1	10	10.000	5.00	3.16	0.0063	1
Ant1	5530	802.11ax80	8.97	9±1	10	10.000	5.00	3.16	0.0063	1
Ant1	5610		9.557	9±1	10	10.000	5.00	3.16	0.0063	1
Ant2	5530	802.11ax80	8.492	9±1	10	10.000	5.00	3.16	0.0063	1
Ant2	5610		8.572	9±1	10	10.000	5.00	3.16	0.0063	1
Ant1	5500	802.11n20	9.146	9±1	10	10.000	5.00	3.16	0.0063	1
Ant1	5600		8.521	9±1	10	10.000	5.00	3.16	0.0063	1

5.8G

Antenna	Channel Freq. (MHz)	modulation	conducted power	Tune-up power (dBm)	Max		Antenna		Evaluation result	Power density Limits
			(dBm)		tune-up power		Gain			
					(dBm)	(mW)	(dBi)	Numeric	(mW/cm ²)	(mW/cm ²)
Ant 1	5745	802.11a	9.13	9±1	10	10.000	5.00	3.16	0.0063	1
Ant 1	5785		9.322	9±1	10	10.000	5.00	3.16	0.0063	1
Ant 1	5825		9.43	9±1	10	10.000	5.00	3.16	0.0063	1
Ant 2	5745	802.11a	9.375	9±1	10	10.000	5.00	3.16	0.0063	1
Ant 2	5785		9.455	9±1	10	10.000	5.00	3.16	0.0063	1
Ant 2	5825		9.267	9±1	10	10.000	5.00	3.16	0.0063	1
Ant 1	5745	802.11ac20	8.068	8±1	9	7.943	5.00	3.16	0.0050	1
Ant 1	5785		8.028	8±1	9	7.943	5.00	3.16	0.0050	1
Ant 1	5825		8.059	8±1	9	7.943	5.00	3.16	0.0050	1
Ant 2	5745	802.11ac20	8.806	8±1	9	7.943	5.00	3.16	0.0050	1
Ant 2	5785		8.886	8±1	9	7.943	5.00	3.16	0.0050	1
Ant 2	5825		8.863	8±1	9	7.943	5.00	3.16	0.0050	1
Ant 1	5755	802.11ac40	7.066	8±1	9	7.943	5.00	3.16	0.0050	1
Ant 1	5795		7.471	8±1	9	7.943	5.00	3.16	0.0050	1
Ant 2	5755	802.11ac40	8.521	8±1	9	7.943	5.00	3.16	0.0050	1
Ant 2	5795		8.69	8±1	9	7.943	5.00	3.16	0.0050	1
Ant 1	5775	802.11ac80	7.579	8±1	9	7.943	5.00	3.16	0.0050	1
Ant 2	5775	802.11ac80	8.95	8±1	9	7.943	5.00	3.16	0.0050	1
Ant 1	5745	802.11ax20	7.445	8±1	9	7.943	5.00	3.16	0.0050	1
Ant 1	5785		7.529	8±1	9	7.943	5.00	3.16	0.0050	1
Ant 1	5825		7.781	8±1	9	7.943	5.00	3.16	0.0050	1
Ant 2	5745	802.11ax20	8.825	9±1	10	10.000	5.00	3.16	0.0063	1
Ant 2	5785		9.015	9±1	10	10.000	5.00	3.16	0.0063	1
Ant 2	5825		8.866	9±1	10	10.000	5.00	3.16	0.0063	1
Ant 1	5755	802.11ax40	7.218	7±1	8	6.310	5.00	3.16	0.0040	1
Ant 1	5795		7.406	7±1	8	6.310	5.00	3.16	0.0040	1
Ant 2	5755	802.11ax40	8.473	8±1	9	7.943	5.00	3.16	0.0050	1
Ant 2	5795		8.551	8±1	9	7.943	5.00	3.16	0.0050	1
Ant 1	5775	802.11ax80	7.475	8±1	9	7.943	5.00	3.16	0.0050	1
Ant 2	5775	802.11ax80	7.804	8±1	9	7.943	5.00	3.16	0.0050	1
Ant 1	5745	802.11n H20	7.126	8±1	9	7.943	5.00	3.16	0.0050	1
Ant 1	5785		7.791	8±1	9	7.943	5.00	3.16	0.0050	1
Ant 1	5825		7.828	8±1	9	7.943	5.00	3.16	0.0050	1
Ant 2	5745	802.11n H20	8.89	8±1	9	7.943	5.00	3.16	0.0050	1
Ant 2	5785		8.817	8±1	9	7.943	5.00	3.16	0.0050	1
Ant 2	5825		8.636	8±1	9	7.943	5.00	3.16	0.0050	1
Ant 1	5755	802.11n H40	7.295	8±1	9	7.943	5.00	3.16	0.0050	1
Ant 1	5795		7.448	8±1	9	7.943	5.00	3.16	0.0050	1
Ant 2	5755	802.11n H40	8.5	8±1	9	7.943	5.00	3.16	0.0050	1
Ant 2	5795		8.786	8±1	9	7.943	5.00	3.16	0.0050	1

SIMULTANEOUS TRANSMISSIONS

When a number of sources at different frequencies, and/or broadband sources, contribute to the total exposure, it becomes necessary to weigh each contribution relative to the MPE. To comply with the MPE, the fraction of the MPE in terms of E^2 , H^2 (or power density) incurred within each frequency interval should be determined and the sum of all such fractions should not exceed unity. In order to ensure compliance with the MPE for a controlled environment, the sum of the ratios of the power density to the corresponding MPE should not exceed unity. That is

$$\sum_{i=1}^n \frac{S_i}{MPE_i} \leq 1$$

Max. SIMULTANEOUS TRANSMISSIONS MODE

Band	Antenna	SISO					MIMO		Verdict
		tune-up power	Antenna	Separation distance (cm)	Evaluation result	Power density	Evaluation result	Power density Limits	
		(dBm)	Gain		(mW/cm2)	(mW/cm2)			
			(dBi)						
Wi-Fi 2.4G N20	Ant1	13	5	20	0.012552	1	0.025104	1	PASS
	Ant2	13	5	20	0.012552	1			
Wi-Fi 5.2G n20	Ant1	10	5	20	0.006291	1	0.012582	1	PASS
	Ant2	10	5	20	0.006291	1			
Wi-Fi 5.3G AC20	Ant1	10	5	20	0.006291	1	0.012582	1	PASS
	Ant2	10	5	20	0.006291	1			
Wi-Fi 5.6G AC20	Ant1	10	5	20	0.006291	1	0.012582	1	PASS
	Ant2	10	5	20	0.006291	1			
Wi-Fi 5.8G AC20	Ant1	9	5	20	0.004997	1	0.009994	1	PASS
	Ant2	9	5	20	0.004997	1			

Conclusion:

For the max result : $0.025104 \leq 1 \text{ mW/cm}^2$ for Power density, compliance with RF exposure.

Note: This product does not support 2.4G band and 5G band simultaneous delivery.

Signature:

Date: 2022-01-12



NAME AND TITLE (Please print or type): alex li/Manager

COMPANY (Please print or type): Shenzhen NTEK Testing Technology Co., Ltd./ 1/F, Building E, Fenda Science Park, Sanwei Community, Xixiang Street Bao'an District, Shenzhen P.R. China.