

MPE CALCULATION

FCC ID: N6C-SDMAC

RF Exposure Requirements:

47 CFR §1.1307(b)

RF Radiation Exposure Limits:

47 CFR §1.1310

RF Radiation Exposure Guidelines:

FCC OST/OET Bulletin Number 65

EUT Frequency Band: 2.4 GHz

2402- 2480MHz

EUT Frequency Band: 2.4 GHz

2412- 2462MHz, 2422-2452MHz

EUT Frequency Band: 5 GHz

5180- 5320MHz, 5500-5720MHz, 5745-5825MHz

5210-5290MHz, 5530-5610MHz, 5690-5775MHz

Limits for General Population/Uncontrolled Exposure in the band of:

1500 - 100,000 MHz

Power Density Limit:

1 mW / cm²

Equation: $S = PG / 4\pi R^2$ or $R = \sqrt{PG / 4\pi S}$

Where, S = Power Density

P = Power Input to Antenna

G = Antenna Gain

R = distance to the center of radiated antenna

Prediction distance 20cm

802.11a/b/g/n/ac Plus Bluetooth SDIO Wi-Fi Module

Type	CH Freq (MHz)	Conducted Power (dBm)	Antenna Gain (dBi)	Apparent Gain (dBi)	Measurement distance (cm)	Calculated MPE (mW/m2)	MPE Limit (mW/m2)	Pass / Fail
BT LE	2480 MHz	1.94	3.25	3.25	20	0.00065	1	Pass
BT BDR/EDR	2441 MHz	1.43	3.25	3.25	20	0.00058	1	Pass
2.4GHz WLAN	2437MHz	24.77	2.5	5.51	20	0.2120	1	Pass
5GHz WLAN	5220 MHz	13.76	4.6	7.61	20	0.0273	1	Pass

Note: Different radio do not transmit simultaneously.

The Above Result had shown that the Device complied with MPE requirement.

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