

FCC MPE CALCULATION (FCC ID: KMH-SYNCG4L)

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: BT/BLE: 2402-2480MHz
WLAN 802.11b/g/n: 2412-2462MHz
802.11a/n: 5180-5320MHz, 5500-5720MHz, 5725-5825MHz
802.11n-40MHz: 5190-5310MHz, 5510-5710MHz, 5755-5795MHz
802.11ac: 5210-5290MHz, 5530-5690MHz, 5775MHz

Limits for General Population/Uncontrolled Exposure in the band of: 300 - 1500 MHz,
Power Density Limit: f/1500 mW/cm²
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 20 cm

EUT: SYNC-G4L

Radio	Frequency (MHz)	Max Conducted Output Power (dBm)	Antenna Gain (dBi)	Separation distance (cm)	Power Density (mW/ cm ²)	MPE Limit (mW/ cm ²)
BT/BLE	2402-2480	9.541	3.02	20	0.0035	1
WLAN 11b/g	2412-2462	15.58	5.16	20	0.023	1
WLAN 11a/n/ac	5725-2825	14.05	9.98	20	0.05	1

The above results show that the device complies with the MPE requirement.

The BT/BLE is able to transmit simultaneously with WLAN, LTE.

The ratio = $0.0035/1 + 0.023/1 + 0.05/1 = 0.0765 < 1.0$

The above results show that the device complies with the simultaneous transmission MPE requirement.

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