FCC RF Exposure

EUT Description: Body Worn Camera
Model No.: D6
FCC ID: 2AL26-D6

1. Limits

According to KDB 447498 D01 General RF Exposure Guidance v06 The 1-g and 10-g SAR test exclusion thresholds for 100 MHz to 6 GHz at test separation distances ≤50 mm are determined by:

[(max power of channel, including tune-up tolerance, mW)/(min. test separation distance, mm)]·[√f(GHz)]≤3.0 for 1-g SAR and ≤ 7.5 for 10-g extremity SAR,

Where:
Result=P/D*√F
F= the RF channel transmit frequency in GHz
P=Maximum turn-up power in mw
D=Min. test separation distance in mm

2. Test Result of RF Exposure Evaluation

	Output power (dBm)	Tune Up Power (dBm)	Max Tune Up power dBm/mW	Min test separation distance mm	Result	Limit (mW/cm^2)	SAR Test Exclusion
BLE	7.45	6.5±1(7.5)	5.623	5	1.743	3.0	Pass
2.4GWIFI	9.19	8.2±1(9.2)	8.318	5	2.584	3.0	Pass
5.2GWIFI	7.49	6.5±1(7.5)	5.623	5	2.560	3.0	Pass
5.8GWIFI	7.43	6.5±1(7.5)	5.623	5	2.696	3.0	Pass
Note: PK Output power= conducted power. Conducted power see the test report **HK2105261641-1E/2E/3E/4E/5E**, BT antenna gain=2dBi 2.4GWIFI antenna gain=2.08dBi 5GWIFI antenna gain=3.3dBi The device supports simultaneous transmission of BT and WIFI, but cannot transmit simultaneously in 2.4G and 5G.							

Per KDB 447498 D01, when the minimum test separation distance is < 5 mm, a distance of 5 mm is applied to determine SAR test exclusion. The test exclusion threshold is 2.696 which is<= 3, SAR testing is not required.

Note: Exclusion Thresholds Results=[(*max. power of channel, including tune-up tolerance, mW*)/(*min. test separation distance, mm*)] ·[$\sqrt{f_{(GHz)}}$]

$f_{(GHz)}$ is the RF channel transmit frequency in GHz

Distance=5mm

When an antenna qualifies for the standalone SAR test exclusion of 4.3.1 and also transmits simultaneously with other antennas, the standalone SAR value must be estimated according to the following to determine the simultaneous transmission SAR test exclusion criteria:

[(max. power of channel, including tune-up tolerance, mW) / (min. test separation distance, mm)]'|[Vf(GHz)/x] W/kg, for test separation distances <= 50 mm; where x= 7.5 for 1-gSAR and x= 18.75 for 10-g SAR.

The worst simultaneous transmission mode of Bluetooth and WiFi is:

BLE+5.8G WIFI=1.743/7.5+2.696/7.5=0.5919<1, so SAR testing is not required.