

MAXIMUM PERMISSIBLE EXPOSURE

KDB 447498 D01 Mobile and Portable Devices RF Exposure Procedures and Equipment Authorization Policies v06.

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)

EUT Specification

| FCC ID 2BC3W-DS208C EUT Portable Karaoke Speaker Frequency band (Operating) ØBT BDR+EDR/BLE: 2.402GHz ~ 2.480GHz @RLAN: 2.412GHz ~ 2.462GHz RLAN: 5.180GHz ~ 2.462GHz @RLAN: 5.180GHz ~ 5.240GHz RLAN: 5.260GHz ~ 5.320GHz @RLAN: 5.500GHz ~ 5.320GHz RLAN: 5.745GHz ~ 5.825GHz Obvice category Portable (<20cm separation) ØMobile (>20cm separation) ØMobile (>20cm separation) ØMobile (>20cm separation) Øthers Exposure classification Occupational/Controlled exposure Øgeneral Population/Uncontrolled exposure Øgeneral Population/Uncontrolled exposure Multiple antenna Multiple antennas Tx diversity Single antenna Max. output power BT BDR+EDR: 1.62dBm (0.0015W) BT BLE: 0.23dBm (0.0011W) Antenna gain (Max) Antenna gain (Max) -0.58dBi | otek photo | An Anbor And And And An | | | | | | | |
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| Frequency band (Operating) BT BDR+EDR/BLE: 2.402GHz ~ 2.480GHz WLAN: 2.412GHz ~ 2.462GHz RLAN: 5.180GHz ~ 5.240GHz RLAN: 5.180GHz ~ 5.20GHz RLAN: 5.260GHz ~ 5.320GHz RLAN: 5.500GHz ~ 5.700GHz RLAN: 5.745GHz ~ 5.825GHz Others: Others: Device category Portable (<20cm separation) Mobile (>20cm separation) Others Others Occupational/Controlled exposure General Population/Uncontrolled exposure General Population/Uncontrolled exposure Antenna diversity Single antenna Multiple antennas Tx diversity Rx diversity BT BDR+EDR: 1.62dBm (0.0015W) BT BLE: 0.23dBm (0.0011W) -0.58dBi | FCC ID Anton Att | 2BC3W-DS208C | | | | | | | |
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| Image: Second system Image: Second system Image: Second | Antenna diversity | Single antenna | | | | | | | |
| Image: Strain | unboit At hotek Anboter | Multiple antennas | | | | | | | |
| Image: Constraint of the state of | Anboter Ano | Tx diversity | | | | | | | |
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| | otek Anbo sek botek | BT BLE: 0.23dBm (0.0011W) | | | | | | | |
| Evaluation applied | Antenna gain (Max) | -0.58dBi | | | | | | | |
| | Evaluation applied | MPE Evaluation | | | | | | | |
| SAR Evaluation | And tak abotek Anbon | □ SAR Evaluation | | | | | | | |

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Anbotek Product Safety

Limits for Maximum Permissible Exposure(MPE)

| 194 | | 14 | 10 der | |
|--------------------|---|---|---|--|
| Electric Field | Magnetic Field | Power Density | Average Time | |
| Strength(V/m) | Strength(A/m) | (mW/cm ²) | An Lotek Anb | |
| (A) Limits for | Occupational/Cont | trol Exposures | Anu | |
| Anbo, A. | lek Antore | F/300 | 6 | |
| Anbore Ant | tek -nbotek | Anbo 5 | 6 | |
| (B) Limits for Gen | eral Population/Ur | control Exposures | otek Anboten | |
| ek abotek | Anbor - An | F/1500 | 30 | |
| All wotek | Anboten Anb | Jek 1, botek | 30 | |
| | Electric Field Strength(V/m) (A) Limits for | Strength(V/m) Strength(A/m) (A) Limits for Occupational/Con | Electric FieldMagnetic FieldPower DensityStrength(V/m)Strength(A/m)(mW/cm²)(A) Limits for Occupational/Control ExposuresF/3005(B) Limits for General Population/Uncontrol Exposures | |

Friis transmission formula: Pd=(Pout*G)\(4*pi*R2)

Where

Pd= Power density in mW/cm²

Pout=output power to antenna in Mw

G= gain of antenna in linear scale

Pi=3.1416

R= distance between observation point and center of the radiator in cm Pd the limit of MPE. If we know the maximum gain of the antenna and total power input to the antenna, through the calculation, we will know the distance where the MPE limit is reached.

Max Measurement Result

| Operating Mode | Measured Power | Tune up tolerance | Max. Tune up Power | Antenna Gain | Power density at 20cm | Power density Limits (mW/cm ²) |
|----------------|-------------------|----------------------|-----------------------|-----------------|-----------------------------|--|
| Anboten Ant | (dBm) | (dBm) | (dBm) | (dBi) | (mW/cm²) | (mvv/cm-) |
| BT BDR+EDR | 1.62 | 1.62 ±1 | 1.62 | -0.58 | 0.0003 | M Nov .ek |
| BT BLE | 0.23 | 0.23 ±1 | 0.23 | -0.58 | 0.0002 | otek 1 Anbo |

Result: No Standalone SAR test is required.

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