# RF EXPOSURE EVALUATION

## 1. PRODUCT INFORMATION

| | |
|---|---|
| Product Description | IP Camera |
| Model Name | Reolink Duo 4G |
| FCC ID | 2A4AS-2109A |

## 2. EVALUATION METHOD AND LIMIT

Human exposure to RF emissions from mobile devices (47 CFR §2.1091) may be evaluated based on the MPE limits adopted by the FCC for electric and magnetic field strength and/or power density, as appropriate, since exposures are assumed to occur at distances of 20 cm or more from persons.

LIMITS FOR GENERAL POPULATION / UNCONTROLLED EXPOSURE

| Frequency Range (MHz) | E-field Strength (E) (V/m) | Magnetic Field Strength (H) (A/m) | Power Density (S) ($mW/cm^2$) | Averaging Time $\|E\|^2$, $\|H\|^2$ or S (Minutes) |
|---|---|---|---|---|
| 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 -- 1500 | -- | -- | f/1500 | 30 |
| 1500 -- 100,000 | -- | -- | 1.0 | 30 |

*Note:

1. f= Frequency in MHz * Plane-wave Equivalent Power Density
2. The averaging time for General Population/Uncontrolled exposure to fixed transmitters is not applicable for mobile and portable transmitters. See 47 CFR §§2.1091 and 2.1093 on source-based time-averaging requirement for mobile and portable transmitters.

$S=PG/4\pi R^2$

Where:

S=power density

P=power input to antenna

G=power gain of the antenna in the direction of interest relative to an isotropic radiator

R=distance to the center of radiation of the antenna

Any report having not been signed by authorized approver, or having been altered without authorization, or having not been stamped by the "Dedicated Testing/Inspection Stamp" is deemed to be invalid. Copying or excerpting portion of, or altering the content of the report is not permitted without the written authorization of AGC. The test results presented in the report apply only to the tested sample. Any objections to report issued by AGC should be submitted to AGC within 15days after the issuance of the test report. Further enquiry of validity or verification of the test report should be addressed to AGC by agc@agc-cert.com.

A minimum test separation distance ⩾ 20 cm is required between the antenna and radiating structures of the device and nearby persons to apply mobile device exposure limits. The distance must be at least 20 cm and fully supported by the operating and installation configurations of the transmitter and its antenna(s), according to the source-based time-averaged maximum power requirements of § 2.1091(d)(2). In cases where cable losses or other attenuations are applied to determine compliance, the most conservative operating configurations and exposure conditions must be evaluated.

| Mode | Frequency (MHz) | Antenna Gain (linear) | Max tune-up (dBm) | Max tune-up (mW) | Power Density (mW/cm$^{2)}$ | Power Density Limit (mW/cm$^{2)}$ |
|---|---|---|---|---|---|---|
| WCDMA850 | 826.4 | 1.57 | 25 | 316.228 | 0.099 | 0.55 |
| WCDMA 1700 | 1712.4 | 2.62 | 25 | 316.228 | 0.165 | 1.00 |
| WCDMA 1900 | 1880.0 | 2.88 | 25 | 316.228 | 0.181 | 1.00 |
| LTE BAND 2 | 1909.3 | 2.62 | 25 | 316.228 | 0.165 | 1.00 |
| LTE BAND 4 | 1754.3 | 3.52 | 25 | 316.228 | 0.221 | 1.00 |
| LTE BAND 12 | 700.5 | 0.96 | 25 | 316.228 | 0.060 | 0.48 |

## 3. conclusion

Compliance the RF exposure requirement

Any report having not been signed by authorized approver, or having been altered without authorization, or having not been stamped by the "Dedicated Testing/Inspection Stamp" is deemed to be invalid. Copying or excerpting portion of, or altering the content of the report is not permitted without the written authorization of AGC. The test results presented in the report apply only to the tested sample. Any objections to report issued by AGC should be submitted to AGC within 15days after the issuance of the test report. Further enquiry of validity or verification of the test report should be addressed to AGC by agc@agc-cert.com.

Attestation of Global Compliance(Shenzhen)Co., Ltd
Attestation of Global Compliance(Shenzhen)Std & Tech Co., Ltd
Tel: +86-755 2523 4088 E-mail: agc@agc-cert.com Web: http://cn.agc-cert.com/