



BSL Testing Co.,Ltd.

RF EXPOSURE Test Report

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| FCC ID: | 2AL7F-Q5 |
| Applicant | Focus Industrial (HongKong) Development CO.,LIMITED |
| Address | Room 803, Chevalier House, 45-51 Chatham Road South, Tsim Sha Tsui, Kowloon , Hong Kong |
| Manufacturer | Shenzhen Focus Electronics CO.,Ltd |
| Address | 9/F,F building, Guancheng low-carbon Industrial Park, Shangcun community,Gongming Street, Guangming District, Shenzhen |
| Product Name: | WIFI CAMERA |
| Model/Type reference: | Q5, 21013, Q2 ,Q4, Q6, Q8, IK-I200, IK-I300, QC01, Q3 Pro, Q3 Max, Q11, C30, C31, C31 Pro, C32, C32 Pro |
| Power supply: | DC 5V |
| Adapter information | Model: YTY-12F-01 05100EU Input: AC 100-240V~50/60Hz 0.3A Max Output: DC 5.0V $\overline{\text{---}}$ 1.0A 5W |
| Hardware version: | V1.0 |
| Software version: | V1.0 |
| Standards: | N/A |
| Test procedure : | KDB 447498 D01 v06 |
| Date of Test | |
| Date of tests | April 26, 2024 ~ May 15, 2024 |
| Test Result. | Pass |
| This device described above has been tested by BSL Testing Co., Ltd. and the test results show that the equipment under test (EUT) is in compliance with the FCC requirements. And it is applicable only to the tested sample identified in the report. | |

RF Exposure Evaluation

Limits

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)

According to KDB 447498 D01 General RF Exposure Guidance v06, Unless specifically required by the published RF exposure KDB procedures, standalone 1-g head or body and 10-g extremity SAR evaluation for general population exposure conditions, by measurement or numerical simulation, is not required when the corresponding SAR Test Exclusion Threshold condition(s), listed below, is (are) satisfied.

Limits for Maximum Permissible Exposure (MPE)

| Frequency range (MHz) | Electric field strength (V/m) | Magnetic field strength (A/m) | Power density (mW/cm ²) | Averaging time (minutes) |
|---|-------------------------------|-------------------------------|-------------------------------------|--------------------------|
| (A) Limits for Occupational/Controlled Exposures | | | | |
| 0.3–3.0 | 614 | 1.63 | *(100) | 6 |
| 3.0–30 | 1842/f | 4.89/f | *(900/f ²) | 6 |
| 30–300 | 61.4 | 0.163 | 1.0 | 6 |
| 300–1500 | | | f/300 | 6 |
| 1500–100,000 | | | 5 | 6 |
| (B) Limits for General Population/Uncontrolled Exposure | | | | |
| 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 |

f = frequency in MHz

Friis transmission formula: $Pd = (Pout * G) / (4 * \pi * r^2)$

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 is the limit of MPE, 1 mW/cm². If we know the maximum gain of the antenna and the total power input to the antenna, through the calculation, we will know the distance r where the MPE limit is reached.

Test Procedure

Software provided by client enabled the EUT to transmit and receive data at lowest, middle and highest channel individually.



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Test Result of RF Exposure Evaluation

2.4GWiFi:

Operation Frequency: WIFI 802.11b/g/n HT20: 2412-2462MHz,

Power density limited: 1mW/ cm²

5GWiFi:

802.11a: 20 MHz

802.11n: 20 MHz

Antenna Type: FPC Antenna

Antenna gain:

WIFI 2.4G: 3.16dBi

WIFI 5G: 3.98dBi

WiFi 2.4G

| Channel | Frequen cy (MHz) | Output power to antenna (dBm) | Output power to antenna (mW) | Power Density at R=20cm (mW/cm ²) | Limit (mW/cm ²) | Result |
|-------------------|------------------------|-------------------------------------|---------------------------------|---|--------------------------------|--------|
| 802.11b | 2412 | 6.254 | 4.22 | 0.00174 | 1.0 | PASS |
| | 2437 | 5.865 | 3.86 | 0.00159 | 1.0 | PASS |
| | 2462 | 5.242 | 3.34 | 0.00138 | 1.0 | PASS |
| 802.11g | 2412 | 2.652 | 1.84 | 0.00076 | 1.0 | PASS |
| | 2437 | 1.986 | 1.58 | 0.00065 | 1.0 | PASS |
| | 2462 | 1.024 | 1.27 | 0.00052 | 1.0 | PASS |
| 802.11n (HT20) | 2412 | 1.564 | 1.43 | 0.00059 | 1.0 | PASS |
| | 2437 | 1.214 | 1.32 | 0.00054 | 1.0 | PASS |
| | 2462 | 0.856 | 1.22 | 0.00050 | 1.0 | PASS |

WiFi 5G UNII-3

| Channel | Frequency (MHz) | Output power to antenna (dBm) | Output power to antenna (mW) | Power Density at R=20cm (mW/cm ²) | Limit (mW/cm ²) | Result |
|-------------------|--------------------|-------------------------------------|---------------------------------|---|--------------------------------|--------|
| 802.11a | 5745 | 0.564 | 1.14 | 0.00057 | 1.0 | PASS |
| | 5785 | 1.241 | 1.33 | 0.00066 | 1.0 | PASS |
| | 5825 | 1.658 | 1.46 | 0.00073 | 1.0 | PASS |
| 802.11n (HT20) | 5745 | 2.456 | 1.76 | 0.00088 | 1.0 | PASS |
| | 5785 | 3.458 | 2.22 | 0.00110 | 1.0 | PASS |
| | 5825 | 3.965 | 2.49 | 0.00124 | 1.0 | PASS |

Conclusion: The RF exposure assessment evaluation results does compliance with the requirement.

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