

RF EXPOSURE REPORT

| | |
|-----------|---|
| Applicant | Shenzhen Hopewin Electronic Material Co.,Ltd |
| Address | Room O-P, Floor 4, Block 9C, Baoneng Science Park, Qingxiang Road, QingHu Industrial Estate, Longhua Street, Longhua District, Shenzhen |



| | |
|-------------------------------------|---|
| Manufacturer or Supplier | Shenzhen Hopewin Electronic Material Co.,Ltd |
| Address | Room O-P, Floor 4, Block 9C, Baoneng Science Park, Qingxiang Road, QingHu Industrial Estate, Longhua Street, Longhua District, Shenzhen |
| Product | Data Logger |
| Brand Name | Cloudleaf |
| Model | S-4.3 |
| Additional Model & Model Difference | N/A |
| Date of tests | Nov. 20, 2019 ~ Dec. 10, 2019 |

☒ **FCC Part 2 (Section 2.1091)**

☒ **KDB 447498 D01**

☒ **IEEE C95.1**

CONCLUSION: The submitted sample was found to COMPLY with the test requirement

| | |
|---|---|
| Tested by Breeze Jiang Project Engineer / EMC Department | Approved by Glyn He Supervisor / EMC Department |
|  |  Date: Dec. 16, 2019 |

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Test Report No.: FM191119N020

RELEASE CONTROL RECORD

| ISSUE NO. | REASON FOR CHANGE | DATE ISSUED |
|--------------|-------------------|---------------|
| FM191119N020 | Original release | Dec. 16, 2019 |

1. CERTIFICATION

| | |
|------------------------|--|
| FCC ID: | 2AM29-HBW05 |
| PRODUCT: | Data Logger |
| BRAND NAME: | Cloudleaf |
| MODEL NO.: | S-4.3 |
| ADDITIONAL NO.: | N/A |
| APPLICANT: | Shenzhen Hopewin Electronic Material Co.,Ltd |
| STANDARDS: | FCC Part 2 (Section 2.1091) |
| | KDB 447498 D01 |
| | IEEE C95.1 |

2. RF EXPOSURE LIMIT

LIMITS FOR MAXIMUM PERMISSIBLE EXPOSURE (MPE)

| FREQUENCY RANGE (MHz) | ELECTRIC FIELD STRENGTH (V/m) | MAGNETIC FIELD STRENGTH (A/m) | POWER DENSITY (mW/cm ²) | AVERAGE TIME (minutes) |
|---|-------------------------------|-------------------------------|-------------------------------------|------------------------|
| LIMITS FOR GENERAL POPULATION / UNCONTROLLED EXPOSURE | | | | |
| 300-1500 | ... | ... | F/1500 | 30 |
| 1500-100,000 | ... | ... | 1.0 | 30 |

F = Frequency in MHz

3. MPE CALCULATION FORMULA

$$P_d = (P_{out} * G) / (4 * \pi * r^2)$$

where

P_d = power density in mW/cm²

P_{out} = output power to antenna in mW

G = gain of antenna in linear scale

π = 3.1416

R = distance between observation point and center of the radiator in cm

4. CLASSIFICATION

The antenna of this product, under normal use condition, is at least 20cm away from the body of the user. So, this device is classified as **Mobile Device**.

5. ANTENNA GAIN

The antennas provided to the EUT, please refer to the following table:

| Transmitter Circuit | Peak Gain (dBi) | Antenna Type |
|---------------------|-----------------|--------------|
| Chain 0 | 1.5 | Chip Antenna |

6. CALCULATION RESULT OF MAXIMUM CONDUCTED AV POWER

The tuned conducted Average Power (declared by client)

| Mode | Frequency (MHz) | Target Power (dBm) | Tolerance (dBm) | Lower Tolerance (dBm) | Upper Tolerance (dBm) |
|-------------|-----------------|--------------------|-----------------|-----------------------|-----------------------|
| BT-LE(GFSK) | 2402-2480 | -5 | +2 | -7 | -3 |

The measured conducted Peak Power

| Mode | Frequency (MHz) | Averaged Power (dBm) |
|-------------|-----------------|----------------------|
| BT-LE(GFSK) | 2480 | -3.43 |

| FREQUENCY BAND (MHz) | MAX AVERAGE POWER (dBm) | ANTENNA GAIN (dBi) | DISTANCE (cm) | POWER DENSITY (mW/cm ²) | LIMIT (mW/cm ²) |
|----------------------|-------------------------|--------------------|---------------|-------------------------------------|-----------------------------|
| 2402-2480 | -3 | 1.5 | 20 | 0.001408 | 1.0 |

--- END ---