

RF EXPOSURE REPORT

| | |
|-----------|---|
| Applicant | TCL Technoly Electronics(Huizhou) Co., Ltd. |
| Address | Section 37, Zhongkai High-tech Development Zone, Huizhou City, Guang Dong Province, China, 516006 |



| | |
|-------------------------------------|---|
| Manufacturer or Supplier | TCL Technoly Electronics(Huizhou) Co., Ltd. |
| Address | Section 37, Zhongkai High-tech Development Zone, Huizhou City, Guang Dong Province, China, 516006 |
| Product | Bluetooth Module |
| Brand Name | N/A |
| Model | EXM1020 |
| Additional Model & Model Difference | N/A |
| Date of tests | Aug. 24, 2017 ~ Aug. 31, 2017 |

☒ **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 Andy Zhu Project Engineer / EMC Department | Approved by Glyn He Supervisor/ EMC Department |
|  |  Date: Sep. 07, 2017 |

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Test Report No.: FS170824N036

RELEASE CONTROL RECORD

| ISSUE NO. | REASON FOR CHANGE | DATE ISSUED |
|--------------|-------------------|---------------|
| FS170824N036 | Original release | Sep. 07, 2017 |

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1. CERTIFICATION

| | |
|------------------------|---|
| FCC ID: | ZVAOH000010 |
| PRODUCT: | Bluetooth Module |
| BRAND NAME: | N/A |
| MODEL NO.: | EXM1020 |
| ADDITIONAL NO.: | N/A |
| TEST SAMPLE: | Engineering Sample |
| APPLICANT: | TCL Technoly Electronics(Huizhou) 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

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

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 | Gain (dBi) | Antenna Type |
|---------------------|------------|--------------|
| Chain 0 | 1.1 | PCB Antenna |

6. CALCULATION RESULT OF MAXIMUM CONDUCTED POWER

The tuned conducted Average Power (declared by client)

| Mode | Target Power (dBm) | Tolerance (dBm) | Lower Tolerance (dBm) | Upper Tolerance (dBm) |
|-------------|--------------------|-----------------|-----------------------|-----------------------|
| BT-LE(GFSK) | 2 | +2 | 0 | 4 |

The measured conducted Average Power

| Mode | Frequency (MHz) | Averaged Power (dBm) |
|-------------|-----------------|----------------------|
| BT-LE(GFSK) | 2402 | 2.77 |

| FREQUENCY BAND (MHz) | MAX AVERAGE POWER (dBm) | ANTENNA GAIN (dBi) | DISTANCE (cm) | POWER DENSITY (mW/cm ²) | LIMIT (mW/cm ²) |
|----------------------|-------------------------|--------------------|---------------|-------------------------------------|-----------------------------|
| 2402-2480 | 4 | 1.1 | 20 | 0.00064 | 1.0 |

--- END ---