



## FCC 47 CFR MPE REPORT

TCL OVERSEAS MARKETING LTD

Satellite Speaker

Model Number: Q95K-RS

Additional Model:

Q95K Pro-RS, Q91K-RS, Q92K-RS, Q93K-RS, Q94K-RS,

Q9CK-RS, Q91C-RS, Q9CC-RS, Q95KS-RS, Q9\*\*\*\*\*-RS,

(\* can be any numerica number "0~9" or alphebtical number "A~Z" or blank)

FCC ID: 2BEHEQ95KRS

|                          |                                                                     |
|--------------------------|---------------------------------------------------------------------|
| Applicant:               | TCL OVERSEAS MARKETING LTD                                          |
| Address:                 | Unit 1905,19/F, Nan Fung Centre, 264-298 Castle Peak Road,          |
|                          | Tsuen Wan, New Territories,Hong Kong                                |
|                          |                                                                     |
| Prepared By:             | EST Technology Co., Ltd.                                            |
|                          | Chilingxiang, Qishantou, Santun, Houjie, Dongguan, Guangdong, China |
| Tel: 86-769-83081888-808 |                                                                     |

|                 |                                |
|-----------------|--------------------------------|
| Report Number:  | ESTE-R2606170                  |
| Date of Test:   | Apr. 16, 2026 to Jun. 02, 2026 |
| Date of Report: | Jun. 08, 2026                  |

## Maximum Permissible Exposure

### 1. Applicable Standards

Systems operating under the provisions of this section shall be operated in a manner that ensures that the public is not exposed to radio frequency energy level in excess limit for maximum permissible exposure. In accordance with 47 CFR FCC Part 2 Subpart J, section 2.1091 & KDB 447498 D04 V01 this device has been defined as a mobile device whereby a distance of 0.2m normally can be maintained between the user and the device.

#### 1.1. Limits for Maximum Permissible Exposure (MPE)

##### (a) Limits for Occupational/Controlled Exposure

| Frequency Range (MHz) | Electric Field Strength (E) (V/m) | Magnetic Field Strength (H) (A/m) | Power Density (S) (mW/cm <sup>2</sup> ) | Averaging Times   E   <sup>2</sup> ,   H   <sup>2</sup> or S (minutes) |
|-----------------------|-----------------------------------|-----------------------------------|-----------------------------------------|------------------------------------------------------------------------|
| 0.3-3.0               | 614                               | 1.63                              | (100)*                                  | 6                                                                      |
| 3.0-30                | 1842/f                            | 4.89/f                            | (900/f)*                                | 6                                                                      |
| 30-300                | 61.4                              | 0.163                             | 1.0                                     | 6                                                                      |
| 300-1500              |                                   |                                   | F/300                                   | 6                                                                      |
| 1500-10000            |                                   |                                   | 5                                       | 6                                                                      |

##### (b) Limits for General Population / Uncontrolled Exposure

| Frequency Range (MHz) | Electric Field Strength (E) (V/m) | Magnetic Field Strength (H) (A/m) | Power Density (S) (mW/cm <sup>2</sup> ) | Averaging Times   E   <sup>2</sup> ,   H   <sup>2</sup> or S (minutes) |
|-----------------------|-----------------------------------|-----------------------------------|-----------------------------------------|------------------------------------------------------------------------|
| 0.3-1.34              | 614                               | 1.63                              | (100)*                                  | 30                                                                     |
| 1.34-30               | 824/f                             | 2.19/f                            | (180/f)*                                | 30                                                                     |
| 30-300                | 27.5                              | 0.073                             | 0.2                                     | 30                                                                     |
| 300-1500              |                                   |                                   | F/1500                                  | 30                                                                     |
| 1500-10000            |                                   |                                   | 1.0                                     | 30                                                                     |

Note: f=frequency in MHz; \*Plane-wave equivalent power density

## 1.2. MPE Calculation Method

$$E \text{ (V/m)} = \frac{\sqrt{30 \times P \times G}}{d} \quad \text{Power Density: } Pd \text{ (W/m}^2\text{)} = \frac{E^2}{377}$$

E = Electric Field (V/m)

P = Peak RF output Power (W)

G = EUT Antenna numeric gain (numeric)

d = Separation distance between radiator and human body (m)

The formula can be changed to

$$Pd = \frac{30 \times P \times G}{377 \times d^2}$$

From the peak EUT RF output power, the minimum mobile separation distance,  $d=0.2\text{m}$ , as well as the gain of the used antenna, the RF power density can be obtained

## 2. Conducted Power Result

Left

| Mode               | Frequency (MHz) | Peak output power (dBm) | Peak output power (mW) |
|--------------------|-----------------|-------------------------|------------------------|
| IEEE 802.11a       | 5180            | 17.80                   | 60.256                 |
|                    | 5200            | 17.82                   | 60.534                 |
|                    | 5240            | 17.09                   | 51.168                 |
|                    | 5260            | 19.16                   | 82.414                 |
|                    | 5300            | 19.31                   | 85.310                 |
|                    | 5320            | 18.84                   | 76.560                 |
|                    | 5500            | 18.39                   | 69.024                 |
|                    | 5580            | 17.89                   | 61.518                 |
|                    | 5700            | 18.95                   | 78.524                 |
|                    | 5720            | 18.37                   | 68.707                 |
|                    | 5745            | 19.17                   | 82.604                 |
|                    | 5785            | 20.93                   | 123.880                |
|                    | 5825            | 18.58                   | 72.111                 |
| IEEE 802.11ax HE20 | 5180            | 17.83                   | 60.674                 |
|                    | 5200            | 18.41                   | 69.343                 |
|                    | 5240            | 18.17                   | 65.615                 |
|                    | 5260            | 18.59                   | 72.277                 |
|                    | 5300            | 18.43                   | 69.663                 |
|                    | 5320            | 18.19                   | 65.917                 |
|                    | 5500            | 18.92                   | 77.983                 |
|                    | 5580            | 18.25                   | 66.834                 |
|                    | 5700            | 18.88                   | 77.268                 |
|                    | 5720            | 17.73                   | 59.293                 |
|                    | 5745            | 19.69                   | 93.111                 |
|                    | 5785            | 19.61                   | 91.411                 |
|                    | 5825            | 18.69                   | 73.961                 |

Right

| Mode               | Frequency (MHz) | Peak output power (dBm) | Peak output power (mW) |
|--------------------|-----------------|-------------------------|------------------------|
| IEEE 802.11a       | 5180            | 17.14                   | 51.761                 |
|                    | 5200            | 17.79                   | 60.117                 |
|                    | 5240            | 16.05                   | 40.272                 |
|                    | 5260            | 18.59                   | 72.277                 |
|                    | 5300            | 18.31                   | 67.764                 |
|                    | 5320            | 18.6                    | 72.444                 |
|                    | 5500            | 18.2                    | 66.069                 |
|                    | 5580            | 17.2                    | 52.481                 |
|                    | 5700            | 18.82                   | 76.208                 |
|                    | 5720            | 19.08                   | 80.910                 |
|                    | 5745            | 20.74                   | 118.577                |
|                    | 5785            | 19.93                   | 98.401                 |
|                    | 5825            | 18.62                   | 72.778                 |
| IEEE 802.11ax HE20 | 5180            | 17.65                   | 58.210                 |
|                    | 5200            | 17.95                   | 62.373                 |
|                    | 5240            | 17.08                   | 51.050                 |
|                    | 5260            | 17.81                   | 60.395                 |
|                    | 5300            | 18.57                   | 71.945                 |
|                    | 5320            | 17.89                   | 61.518                 |
|                    | 5500            | 18.78                   | 75.509                 |
|                    | 5580            | 18.22                   | 66.374                 |
|                    | 5700            | 19                      | 79.433                 |
|                    | 5720            | 17.43                   | 55.335                 |
|                    | 5745            | 17.53                   | 56.624                 |
|                    | 5785            | 19.66                   | 92.470                 |
|                    | 5825            | 17.63                   | 57.943                 |

### 3. Calculated Result and Limit

Left

| Mode              | Peak output power (dBm) | Target power (dBm) | MAX Target power (dBm) | Antenna gain |          | Power Density (S) (mW /cm <sup>2</sup> ) | Limited of Power Density (S) (mW /cm <sup>2</sup> ) | Test Result |
|-------------------|-------------------------|--------------------|------------------------|--------------|----------|------------------------------------------|-----------------------------------------------------|-------------|
|                   |                         |                    |                        | (dBi)        | (Linear) |                                          |                                                     |             |
| 5G Band           |                         |                    |                        |              |          |                                          |                                                     |             |
| IEEE 802.11a      | 20.93                   | 20±1               | 21                     | 2.78         | 1.897    | 0.04750                                  | 1                                                   | Complies    |
| IEEE802.11ax HE20 | 19.69                   | 19±1               | 20                     | 2.78         | 1.897    | 0.03773                                  | 1                                                   | Complies    |

Right

| Mode              | Peak output power (dBm) | Target power (dBm) | MAX Target power (dBm) | Antenna gain |          | Power Density (S) (mW /cm²) | Limited of Power Density (S) (mW /cm²) | Test Result |
|-------------------|-------------------------|--------------------|------------------------|--------------|----------|-----------------------------|----------------------------------------|-------------|
|                   |                         |                    |                        | (dBi)        | (Linear) |                             |                                        |             |
| 5G Band           |                         |                    |                        |              |          |                             |                                        |             |
| IEEE 802.11a      | 20.74                   | 20±1               | 21                     | 3.73         | 2.360    | 0.05912                     | 1                                      | Complies    |
| IEEE802.11ax HE20 | 19.66                   | 19±1               | 20                     | 3.73         | 2.360    | 0.04696                     | 1                                      | Complies    |

**End of Test Report**