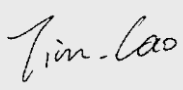
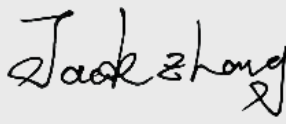


Test report No:  
2270660R-RF-US-P20V01

## FCC Exposure TEST REPORT

|                                             |                                                                                                                 |
|---------------------------------------------|-----------------------------------------------------------------------------------------------------------------|
| Product Name                                | Docking Station (Vehicle)                                                                                       |
| Trademark                                   | Datalogic                                                                                                       |
| Model and /or type reference                | DL36VSD                                                                                                         |
| FCC ID                                      | U4GDL36VSD                                                                                                      |
| Applicant's name / address                  | Datalogic S.r.l.<br>Via San Vitalino no.13,Calderara di Reno -40012(BO)-Italy                                   |
| Test method requested, standard             | KDB 680106 D01 RF Exposure Wireless Charging App v03r01                                                         |
| Verdict Summary                             | IN COMPLIANCE                                                                                                   |
| Documented by (name / position & signature) | Tim Cao/Project Engineer<br> |
| Approved by (name / position & signature)   | Jack Zhang/ Supervisor<br>  |
| Date of issue                               | 2022-11-29                                                                                                      |
| Report Version                              | V1.0                                                                                                            |
| Report template No                          | Template_FCC MPE-RF-V1.0                                                                                        |

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## COMPETENCES AND GUARANTEES

DEKRA is a testing laboratory competent to carry out the tests described in this report.

In order to assure the traceability to other national and international laboratories, DEKRA has a calibration and maintenance program for its measurement equipment.

DEKRA guarantees the reliability of the data presented in this report, which is the result of the measurements and the tests performed to the item under test on the date and under the conditions stated in the report and it is based on the knowledge and technical facilities available at DEKRA at the time of performance of the test.

DEKRA is liable to the client for the maintenance of the confidentiality of all information related to the item under test and the results of the test.

The results presented in this Test Report apply only to the particular item under test established in this document.

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## GENERAL CONDITIONS

|                      |                                                                        |
|----------------------|------------------------------------------------------------------------|
| Test Location        | No. 99, Hongye Road, Suzhou Industrial Park Suzhou, 215006, P.R. China |
| Date(receive sample) | Jul. 25, 2022                                                          |
| Date (start test)    | Jul. 26, 2022                                                          |
| Date (finish test)   | Aug. 12, 2022                                                          |

1. This report is only referred to the item that has undergone the test.
2. This report does not constitute or imply on its own an approval of the product by the Certification Bodies or Competent Authorities.
3. This document is only valid if complete; no partial reproduction can be made without previous written permission of DEKRA.
4. This test report cannot be used partially or in full for publicity and/or promotional purposes without previous written permission of DEKRA.

## ENVIRONMENTAL CONDITIONS

The climatic conditions during the tests are within the limits specified by the manufacturer for the operation of the EUT and the test equipment. The climatic conditions during the tests were within the following limits:

|                       |               |
|-----------------------|---------------|
| Ambient temperature   | 15 °C - 35 °C |
| Relative Humidity air | 30% - 60%     |

If explicitly required in the basic standard or applied product / product family standard the climatic values are recorded and documented separately in this test report.

## POSSIBLE TEST CASE VERDICTS

|                                         |                 |
|-----------------------------------------|-----------------|
| Test case does not apply to test object | N/A             |
| Test object does meet requirement       | P (Pass) / PASS |
| Test object does not meet requirement   | F (Fail) / FAIL |
| Not measured                            | N/M             |

## ABBREVIATIONS

For the purposes of the present document, the following abbreviations apply:

|       |                               |
|-------|-------------------------------|
| EUT   | : Equipment Under Test        |
| QP    | : Quasi-Peak                  |
| CAV   | : CISPR Average               |
| AV    | : Average                     |
| CDN   | : Coupling Decoupling Network |
| SAC   | : Semi-Anechoic Chamber       |
| OATS  | : Open Area Test Site         |
| BW    | : Bandwidth                   |
| AM    | : Amplitude Modulation        |
| PM    | : Pulse Modulation            |
| HCP   | : Horizontal Coupling Plane   |
| VCP   | : Vertical Coupling Plane     |
| $U_N$ | : Nominal voltage             |
| Tx    | : Transmitter                 |
| Rx    | : Receiver                    |
| N/A   | : Not Applicable              |
| N/M   | : Not Measured                |

## DOCUMENT HISTORY

| Report No.            | Version | Description              | Issued Date |
|-----------------------|---------|--------------------------|-------------|
| 2270660R-RF-US-P20V01 | V1.0    | Initial issue of report. | 2022-11-29  |
|                       |         |                          |             |
|                       |         |                          |             |
|                       |         |                          |             |
|                       |         |                          |             |
|                       |         |                          |             |
|                       |         |                          |             |
|                       |         |                          |             |
|                       |         |                          |             |
|                       |         |                          |             |

## REMARKS AND COMMENTS

1. The equipment under test (EUT) does meet the essential requirements of the stated standard(s)/test(s).
2. These test results on a sample of the device are for the purpose of demonstrating Compliance with KDB 680106.
3. The measurement result is considered in conformance with the requirement if it is within the prescribed limit, It is not necessary to account the uncertainty associated with the measurement result.
4. The test results presented in this report relate only to the object tested.
5. The test report shall not be reproduced without the written approval of DEKRA Testing and Certification (Suzhou) Co., Ltd.
6. This report will not be used for social proof function in China market.

## 1. General Information

### 1.1. EUT Description

|                            |                                                           |
|----------------------------|-----------------------------------------------------------|
| Product Name..... :        | Docking Station (Vehicle)                                 |
| Model No. .... :           | DL36VSD                                                   |
| Trademark .....            | Datalogic                                                 |
| FCC ID .....               | U4GDL36VSD                                                |
| Manufacturer .....         | Datalogic S.r.l.                                          |
| Manufacturer address ..... | Via San Vitalino no.13,Calderara di Reno -40012(BO)-Italy |

|                                    |             |
|------------------------------------|-------------|
| Operating Frequency Range .....    | 119-140KHz  |
| Type of Modulation .....           | ASK         |
| Number of Channel..... :           | 1           |
| Operating Temperature Range..... : | 0°C ~ 40 °C |

|                          |                                                                                          |                                  |
|--------------------------|------------------------------------------------------------------------------------------|----------------------------------|
| Rated power supply ..... | Voltage and Frequency                                                                    |                                  |
|                          | <input type="checkbox"/>                                                                 | AC: 220 – 240 V, 50/60 Hz        |
|                          | <input type="checkbox"/>                                                                 | AC: 110 – 130 V, 50/60 Hz        |
|                          | <input checked="" type="checkbox"/>                                                      | DC: 12V/24V 1.5A                 |
|                          | <input type="checkbox"/>                                                                 | Battery: 12 Vdc                  |
| Mounting position..... : | <input type="checkbox"/>                                                                 | Table top equipment              |
|                          | <input type="checkbox"/>                                                                 | Wall/Ceiling mounted equipment   |
|                          | <input type="checkbox"/>                                                                 | Floor standing equipment         |
|                          | <input type="checkbox"/>                                                                 | Hand-held equipment              |
|                          | <input checked="" type="checkbox"/>                                                      | Other: vehicle-mounted equipment |
| Test perimeter .....     | Product Name: MOBILE COMPITER<br>Model: MEMOR 10<br>FCC ID: U4GDL35US<br>IC:3862E-DL35US |                                  |

## 1.2. Antenna information

|                                   |                                     |              |                                     |                      |
|-----------------------------------|-------------------------------------|--------------|-------------------------------------|----------------------|
| Antenna model / type number ..... | N/A                                 |              |                                     |                      |
| Antenna serial number .....       | N/A                                 |              |                                     |                      |
| Antenna Delivery .....            | <input checked="" type="checkbox"/> | 1TX + 1RX    |                                     |                      |
|                                   | <input type="checkbox"/>            | 2TX + 2RX    |                                     |                      |
|                                   | <input type="checkbox"/>            | Others:..... |                                     |                      |
| Antenna technology .....          | <input checked="" type="checkbox"/> | SISO         |                                     |                      |
|                                   | <input type="checkbox"/>            | MIMO         | <input type="checkbox"/>            | CDD                  |
|                                   |                                     |              | <input type="checkbox"/>            | Beam-forming         |
| Antenna Type .....                | <input type="checkbox"/>            | External     | <input type="checkbox"/>            | Dipole               |
|                                   |                                     |              | <input type="checkbox"/>            | Sectorized           |
|                                   | <input checked="" type="checkbox"/> | Internal     | <input type="checkbox"/>            | Ceramic Chip         |
|                                   |                                     |              | <input type="checkbox"/>            | PIFA                 |
|                                   |                                     |              | <input type="checkbox"/>            | PCB                  |
|                                   |                                     |              | <input checked="" type="checkbox"/> | Others: Coil antenna |
| Antenna Gain.....                 | N/A                                 |              |                                     |                      |

### 1.3. Mode of Operation

DEKRA has verified the construction and function in typical operation. All the test modes were carried out with the EUT in normal operation, which was shown in this test report and defined as:

| Test Mode        |
|------------------|
| Mode 1: Transmit |

Note:

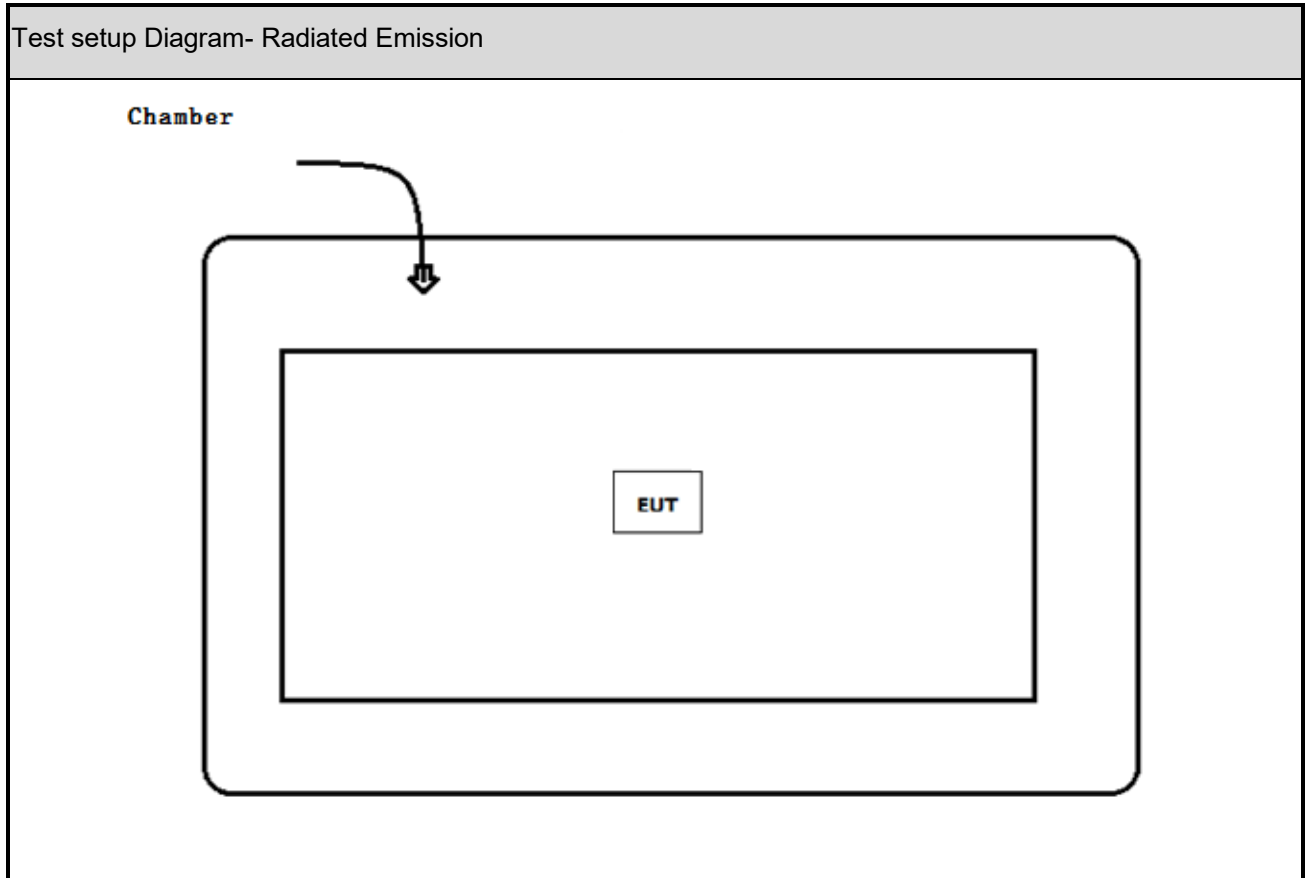
1. Regards to the frequency band operation: the lowest, middle and highest frequency of channel were selected to perform the test, then shown on this report.
2. For portable device, radiated spurious emission was verified over X, Y, Z Axis, and shown the worst case on this report.

#### 1.4. Tested System Details

The types for all equipment, plus descriptions of all cables used in the tested system (including inserted cards) are:

| Product | Manufacturer | Model No. | Serial No. | Power Cord |
|---------|--------------|-----------|------------|------------|
| 1 N/A   | N/A          | N/A       | N/A        | N/A        |

## 1.5. Configuration of Tested System



## 1.6. EUT Exercise Software

|   |                                                 |
|---|-------------------------------------------------|
| 1 | Setup the EUT and simulators as shown on above. |
| 2 | Turn on the power of equipment.                 |
| 3 | Start to continue transmit.                     |

Note: We use the mobile phone provided by the customer as the load, we have verified the charging test under each power, and the worst state is placed in the report.

## 2. Technical Test

### 2.1. Test Environment

| Items                      | Required (IEC 68-1) | Actual   |
|----------------------------|---------------------|----------|
| Temperature (°C)           | 15-35               | 21       |
| Humidity (%RH)             | 25-75               | 50       |
| Barometric pressure (mbar) | 860-1060            | 950-1000 |

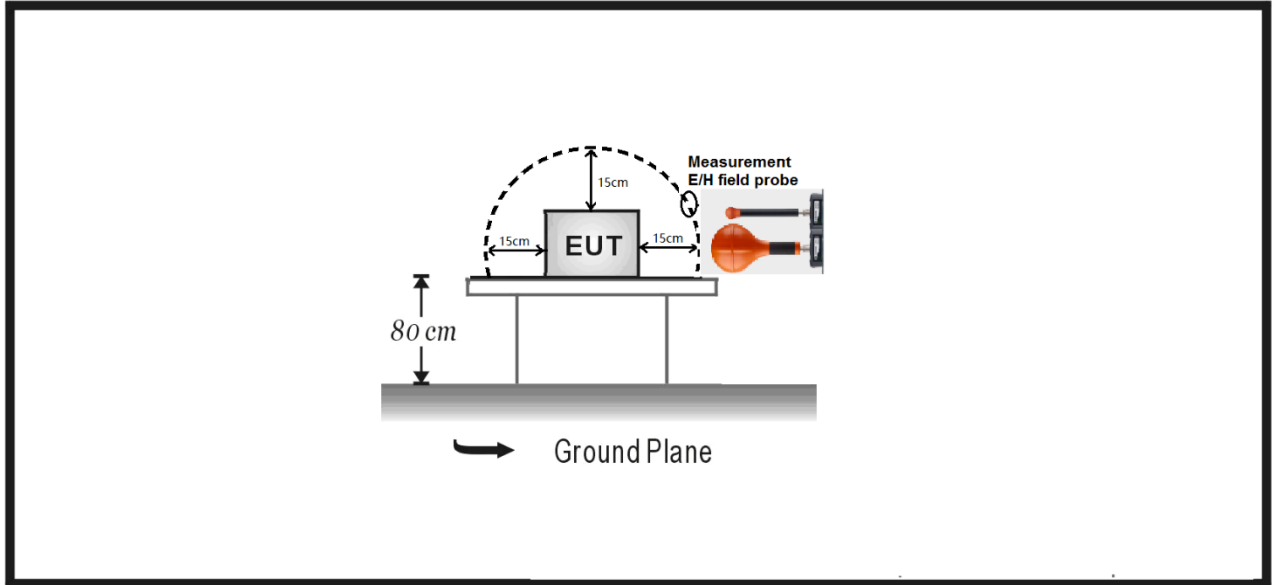
### 3. Electric Field Strength / Magnetic Field Strength

#### 3.1. Test Equipment

| Electric Field Strength / Magnetic Field Strength / AC-6                                                                                  |              |          |            |            |               |
|-------------------------------------------------------------------------------------------------------------------------------------------|--------------|----------|------------|------------|---------------|
| Instrument                                                                                                                                | Manufacturer | Type No. | Serial No. | Cal. Date  | Cal. Due Date |
| Field Meter                                                                                                                               | WAVECONTROL  | SMP2     | 20SN1286   | 2022.07.21 | 2023.07.20    |
| E&H Field Probe                                                                                                                           | WAVECONTROL  | WP400    | 20WP100630 | 2022.07.21 | 2023.07.20    |
| E Field Probe                                                                                                                             | WAVECONTROL  | WPF3     | 20WP030374 | 2022.07.21 | 2023.07.20    |
| Temperature/Humidity Meter                                                                                                                | RTS          | RTS-8S   | RF06       | 2022.07.07 | 2023.07.06    |
| Note: All equipment are calibrated with traceable calibrations. Each calibration is traceable to the national or international standards. |              |          |            |            |               |

### 3.2. Test Setup

3kHz~10MHz Test Setup:



Note: The measured distance is the distance from the edge of the device to the center of the probe.

### 3.3. Limit

According to KDB 680106 D01v03r01 Clause 3.c: For devices designed for typical desktop applications, such a wireless charging pads, RF exposure evaluation should be conducted assuming a user separation distance of 15 cm. E and H field strength measurements or numerical modeling may be used to demonstrate compliance. Measurements should be made from all sides and the top of the primary/client pair, with the 15 cm measured from the center of the probe(s) to the edge of the device. Emissions between 100 kHz to 300 kHz should be assessed versus the limits at 300 kHz in Table 1 of Section 1.1310: 614 V/m and 1.63 A/m.

### 3.4. Test Procedure

- a. Set the measurement frequency of the measurement probe to the fundamental frequency of the device under test.
- b. Set the span to encompass the entire emission bandwidth.
- c. Set the RBW greater than the 99% OBW of the fundamental emission.

Note: This step is not required for a broadband measurement probe that integrates the entire frequency range.

- d. Set the detector to Peak and trace display to Max-Hold.
- e. Allow the spectrum to fill; for pulsing devices this may require an increased monitoring period.
- f. Using a marker, set it to the maximum level of the spectral envelope.
- g. Repeat steps (b) to (f) while scanning a parallel plane at the measurement distance of 10cm on each side of the device to find the peak level.
- h. Repeat steps (b) to (g) for any frequencies where the field value is greater than -20 dBc below the maximum level identified.
- i. If there are multiple frequencies transmitted by the device under test, use equations (2) and (3) to determine compliance.

Note: When scanning around the entire device, the location found to be the maximum for the E- or H-field may not be the same location as the opposite field.

### 3.5. Uncertainty

The measurement uncertainty is defined as  $\pm 3.10$  dB

### 3.6. Test Result

| Test Location | Test Separation Distance (cm) | Maximum Electric Field Level (V/m) | Maximum Magnetic Field Level (A/m) | Electric Field Limit (V/m) | Magnetic Field Limit (A/m) | Result |
|---------------|-------------------------------|------------------------------------|------------------------------------|----------------------------|----------------------------|--------|
| Top           | 15                            | 6.321                              | 0.526                              | 614                        | 1.63                       | Pass   |
| Front         | 15                            | 2.231                              | 0.411                              | 614                        | 1.63                       | Pass   |
| Back          | 15                            | 1.125                              | 0.321                              | 614                        | 1.63                       | Pass   |
| Left          | 15                            | 1.026                              | 0.325                              | 614                        | 1.63                       | Pass   |
| Right         | 15                            | 1.154                              | 0.264                              | 614                        | 1.63                       | Pass   |

#### 4. RF Exposure Evaluation

| WPT Device requirement              |                                                                                                                                                                                                                                          |
|-------------------------------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| <input checked="" type="checkbox"/> | Wireless power transfer frequency is below 1 MHz.                                                                                                                                                                                        |
| <input checked="" type="checkbox"/> | Output power from each primary coil is less than or equal to 15 watts.                                                                                                                                                                   |
| <input checked="" type="checkbox"/> | The transfer system includes only single primary and secondary coils. This includes charging systems that may have multiple primary coils and clients that are able to detect and allow coupling only between individual pairs of coils. |
| <input checked="" type="checkbox"/> | Client device is placed directly in contact with the transmitter.                                                                                                                                                                        |
| <input checked="" type="checkbox"/> | Mobile exposure conditions only (portable exposure conditions are not covered by this exclusion).                                                                                                                                        |
| <input checked="" type="checkbox"/> | The aggregate H-field strengths at 15 cm surrounding the device and 20 cm above the top surface from all simultaneous transmitting coils are demonstrated to be less than 50% of the MPE limit.                                          |

Note: The WPT device can meet all the six requirements above.

\_\_\_\_\_ The End \_\_\_\_\_