



# FCC RF Test Report

**APPLICANT** : Opticon Sensors Europe B.V  
**EQUIPMENT** : Mobile computers  
**BRAND NAME** : Opticon  
**MODEL NAME** : H-31  
**FCC ID** : Q2QH31  
**STANDARD** : 47 CFR Part 15 Subpart C §15.247  
**CLASSIFICATION** : (DTS) Digital Transmission System

This is a data re-used report which is only valid together with the original test report. We, Sporton International (Kunshan) Inc., would like to declare that the tested sample has been evaluated in accordance with the test procedures and has been in compliance with the applicable technical standards.

The test results in this report apply exclusively to the tested model / sample. Without written approval of Sporton International (Kunshan) Inc., the test report shall not be reproduced except in full.

Reviewed by: Jason Jia / Supervisor

Approved by: James Huang / Manager



**Sportun International (Kunshan) Inc.**  
No. 1098, Pengxi North Road, Kunshan Economic Development Zone Jiangsu Province 215300  
People's Republic of China



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## APPENDIX A. REFERENCE REPORT



# REVISION HISTORY



## 1 General Description

### 1.1 Applicant

**Opticon Sensors Europe B.V**  
Opaallaan 35, 2132 XV Hoofddorp, The Netherlands.

### 1.2 Manufacturer

**iWaylink Inc.**  
6F., No. 288, Sec. 6, Civic Blvd., Xinyi Dist., Taipei City 110, Taiwan (R.O.C.)

### 1.3 Product Feature of Equipment Under Test

| Product Feature                        |   |
|--|---|
| <b>Equipment</b>                       | Mobile computers  |
| <b>Brand Name</b>                      | Opticon   |
| <b>Model Name</b>                      | H-31  |
| <b>FCC ID</b>                          | Q2QH31  |
| <b>EUT supports Radios application</b> | NFC/GNSS<br>WLAN 2.4GHz 802.11b/g/n HT20/HT40<br>WLAN 5GHz 802.11a/n HT20/HT40<br>WLAN 5GHz 802.11ac VHT20/VHT40/VHT80<br>Bluetooth BR / EDR / LE |
| <b>HW Version</b>                      | V1.02   |
| <b>SW Version</b>                      | PR02.191205.001   |

**Remark:** The above EUT's information was declared by manufacturer. Please refer to the specifications or user's manual for more detailed description.

### 1.4 Product Specification of Equipment Under Test

| Standards-related Product Specification  |  |
|--|--|
| <b>Tx/Rx Frequency Range</b>             | 2402 MHz ~ 2480 MHz                            |
| <b>Number of Channels</b>                | 40   |
| <b>Carrier Frequency of Each Channel</b> | 40 Channel(37 hopping + 3 advertising channel) |
| <b>Antenna Type / Gain</b>               | FPC Antenna with gain 2.89 dBi                 |
| <b>Type of Modulation</b>                | Bluetooth LE : GFSK                            |

### 1.5 Modification of EUT

No modifications are made to the EUT during all test items.



## 1.6 Re-use of Measured Data

### 1.6.1 Introduction Section

This application re-uses data collected on a similar device. The subject device of this application (Model: H-31, FCC ID: Q2QH31) is electrically identical to the reference device (Model: H-33, FCC ID: Q2QH33NCSA) for the portions of the circuitry corresponding to the data being re-used, as treated by KDB Publication 484596 D01.

### 1.6.2 Difference Section

For details concerning the similarity with respect to component placement, mechanical/electrical design etc., please refer to the Product Equality Declaration.

The re-used RF data includes the following bands provided in Appendix A (Sportun RF Report No. FR982718B for the reference device Model: H-33, FCC ID: Q2QH33NCSA).

### 1.6.3 Reference detail Section:

| Equipment Class | Reference FCC ID | Folder Test        | Report Title/Section    |
|-----------------|------------------|--------------------|-------------------------|
| DSS (BR/EDR)    | Q2QH33NCSA       | Part15C(FR982718A) | All sections applicable |
| DTS (BLE)       | Q2QH33NCSA       | Part15C(FR982718B) | All sections applicable |
| DTS (WLAN)      | Q2QH33NCSA       | Part15C(FR982718C) | All sections applicable |
| DXX (NFC)       | Q2QH33NCSA       | Part15C(FR982718D) | All sections applicable |

### 1.6.4 Spot Check Verification Data Section

In order to confirm hardware similarity of the subject device with the reference device, spot check measurements were performed on the subject device for the following test items, the test result were consistent with FCC ID: Q2QH33NCSA.

Assertions concerning the similarity of these devices are based on representations by the applicant. The applicant accepts full responsibility for the validity of the similarity claim, and for the determination that verification test data are sufficient to support it.

| Test Item                           | Mode         | Q2QH33NCSA Worst Result | Q2QH31 Worst Result | Difference (dB) |
|-------------------------------------|--------------|-------------------------|---------------------|-----------------|
| Radiated Spurious Emission (dBuV/m) | BT (BR/EDR)  | 28.08                   | 30.18               | 2.1             |
|                                     | BT (LE)      | 43.28                   | 43.27               | -0.01           |
|                                     | WLAN(2.4GHz) | 53.5                    | 49.07               | -4.43           |
|                                     | NFC          | 38.92                   | 38.32               | -0.6            |



## **Appendix A. Reference Report**

Please refer to Sporton report number FR982718B which is issued separately.