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

JasonJia

Approved by: James Huang / Manager

Sporton International (Kunshan) Inc.

No. 1098, Pengxi North Road, Kunshan Economic Development Zone Jiangsu Province 215300 People's Republic of China

Sporton International (Kunshan) Inc.

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Report Issued Date : May 08, 2020
Report Version : Rev. 01

Cert #5145.02

Report No.: FR982715-01C

Report Template No.: BU5-FR15CWL AC MA Version 2.0

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APPENDIX A. REFERENCE REPORT

Sporton International (Kunshan) Inc. TEL: +86-512-57900158

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REVISION HISTORY

Report No. : FR982715-01C

REPORT NO.	VERSION	DESCRIPTION	ISSUED DATE
FR982715-01C	Rev. 01	Initial issue of report	May 08, 2020

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

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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			
Tx/Rx Channel Frequency Range	2412 MHz ~ 2462 MHz		
Antenna Type / Gain	FPC Antenna with gain 2.89 dBi		
Type of Modulation	802.11b : DSSS (DBPSK / DQPSK / CCK) 802.11g/n : OFDM (BPSK / QPSK / 16QAM / 64QAM)		

1.5 Modification of EUT

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

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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.

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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 (Sporton RF Report No. FR982718C 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)
	BT (BR/EDR)	28.08	30.18	2.1
Radiated Spurious	BT (LE)	43.28	43.27	-0.01
Emission (dBuV/m)	WLAN(2.4GHz)	53.5	49.07	-4.43
(4241,)	NFC	38.92	38.32	-0.6

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Appendix A. Reference Report

Please refer to Sporton report number FR982718C which is issued separately.

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