



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 : (DSS) Spread Spectrum Transmitter

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.

Jason Jia

Reviewed by: Jason Jia / Supervisor

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APPENDIX A. REFERENCE REPORT



REVISION HISTORY

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

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
EUT supports Radios application	NFC/GNSS WLAN 2.4GHz 802.11b/g/n HT20/HT40 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

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 Frequency Range	2402 MHz ~ 2480 MHz
Number of Channels	79
Carrier Frequency of Each Channel	2402+n*1 MHz; n=0~78
Antenna Type / Gain	FPC Antenna with gain 2.89 dBi
Type of Modulation	Bluetooth BR (1Mbps) : GFSK Bluetooth EDR (2Mbps) : $\pi/4$ -DQPSK Bluetooth EDR (3Mbps) : 8-DPSK

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 (Sporton RF Report No. FR982718A 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 FR982718A which is issued separately.