

Radio Exposure Evaluation Report

FCC ID : 2AKWYXBP301

Equipment : Digital Transmission System

Brand Name : DynaScan Technology Corp.

Model Name : XBP301

Applicant : DYNASCAN TECHNOLOGY CORP.
6F, No.88, Wenmao Rd., Guishan Dist., Taoyuan City
333001, Taiwan

Manufacturer : DYNASCAN TECHNOLOGY CORP.
6F, No.88, Wenmao Rd., Guishan Dist., Taoyuan City
333001, Taiwan

Standard : 47 CFR FCC Part 2 Subpart J, section 2.1091

The product was received on Feb. 28, 2020, and testing was started from Apr. 14, 2020 and completed on Apr. 17, 2020. We, SPORTON INTERNATIONAL INC. Hsinhua Laboratory, would like to declare that the tested sample has been evaluated in accordance with the procedures given in 47 CFR FCC Part 2 Subpart J, section 2.1091 and shown compliance with the applicable technical standards.

The test results in this partial report apply exclusively to the tested model / sample. Without written approval of SPORTON INTERNATIONAL INC. Hsinhua Laboratory, the test report shall not be reproduced except in full.


Approved by: Allen Lin

SPORTON INTERNATIONAL INC. Hsinhua Laboratory
No.52, Huaya 1st Rd., Guishan Dist., Taoyuan City 333411, Taiwan (R.O.C.)



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Photographs of EUT V01





Summary of Test Result

Report Clause	Ref Std. Clause	Test Items	Result (PASS/FAIL)	Remark
2	-	Exposure evaluation	PASS	-

Declaration of Conformity:

The test results with all measurement uncertainty excluded are presented in accordance with the regulation limits or requirements declared by manufacturers.

Comments and Explanations:

None

Reviewed by: Sam Tsai

Report Producer: Amber Chiu

1 General Description

1.1 Information

1.1.1 EUT General Information

RF General Information			
Evaluation Mode	Frequency Range (MHz)	Operating Frequency (MHz)	Modulation Type
2.4GHz WLAN	2400-2483.5	2412-2462	802.11b: DSSS (DBPSK, DQPSK, CCK) 802.11g/n: OFDM (BPSK, QPSK, 16QAM, 64QAM)

1.1.2 Antenna Information

Ant.	Port	Brand	Model Name	Antenna Type	Connector	Gain (dBi)
1	1	-	-	PIFA	N/A	0.87
2	2	-	-	PIFA	N/A	0.87

Note 1: The EUT has two antennas.

For 2.4GHz function:

For IEEE 802.11 b/g/n mode (2TX/2RX)

Ant. 1 (port 1) and Ant. 2 (port 2) could transmit/receive simultaneously.

1.1.3 Table for Permissive Change

This product is an extension of original one reported under Sporton project number: FA9N1207-01.

Below is the table for the change of the product with respect to the original one.

Modifications	Performance Checking
1. Host was added. 2. Applicant and Manufacturer address was modified.	N/A

1.1.4 Accessories

Accessories				
Remote Control	Brand Name	DynaScan	Model Name	JX-9060
IR Cable	Brand Name	DynaScan	Model Name	Y001-1204

Reminder: Regarding to more detail and other information, please refer to user manual.



1.2 Testing Location

Test Lab. : Sporton International Inc. Hsinhua Laboratory		
☒	Hsinhua (TAF: 3785)	ADD: No.52, Huaya 1st Rd., Guishan Dist., Taoyuan City 333411, Taiwan (R.O.C.)
		TEL: 886-3-327-3456 FAX: 886-3-327-0973
Test site Designation No. TW3785 with FCC.		
☐	Wen 33rd.St. (TAF: 3785)	ADD: No.14-1, Ln. 19, Wen 33rd St., Guishan Dist., Taoyuan City 333010, Taiwan (R.O.C.)
		TEL: 886-3-318-0787 FAX: 886-3-318-0287
Test site Designation No. TW0008 with FCC.		

Laboratory number TAF 3785 is a spin-off from the original Laboratory number TAF 1190.

2 Maximum Permissible Exposure

2.1 Limit of Maximum Permissible Exposure

(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 ²)	Averaging Time E ² , H ² or S (minutes)
0.3-3.0	614	1.63	(100)*	6
3.0-30	1842 / f	4.89 / f	(900 / f ²)*	6
30-300	61.4	0.163	1.0	6
300-1500	-	-	F/300	6
1500-100,000	-	-	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 ²)	Averaging Time E ² , H ² or S (minutes)
0.3-1.34	614	1.63	(100)*	30
1.34-30	824/f	2.19/f	(180/f ²)*	30
30-300	27.5	0.073	0.2	30
300-1500	-	-	F/1500	30
1500-100,000	-	-	1.0	30

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

2.2 MPE Calculation Method

The MPE was calculated at 20 cm to show compliance with the power density limit.

The following formula was used to calculate the Power Density:

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

E = Electric field (V/m)

P = 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

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



2.3 Calculated Result and Limit

Exposure Environment: General Population / Uncontrolled Exposure

Mode	DG (dBi)	Power (dBm)	EIRP (dBm)	Tolerance (dB)	Tune-up EIRP (dBm)	Tune-up EIRP (W)	Distance (cm)	S (mW/cm ²)	S Limit (mW/cm ²)
2.4G;G1D	0.87	23.42	24.29	0.50	24.79	0.30130	20	0.05994	1.00000
2.4G;D1D	0.87	21.08	21.95	0.50	22.45	0.17579	20	0.03497	1.00000

—————THE END—————