

RF Exposure Report

Report No.: SA180202C21 R2

FCC ID: ORS1708010318

Test Model: LKR01-C-303

Series Model: LKR01-YY303 ("Y" can be A-Z, "-", or blank, for marketing purpose)

Received Date: Feb. 02, 2018

Test Date: Feb. 09 ~ Feb. 24, 2018

Issued Date: Apr. 13, 2018

Applicant: SKARDIN INDUSTRIAL CORP.

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Issued By: Bureau Veritas Consumer Products Services (H.K.) Ltd., Taoyuan Branch

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Test Location: No. 19, Hwa Ya 2nd Rd., Wen Hwa Vil., Kwei Shan Dist., Taoyuan City 33383, TAIWAN (R.O.C.)



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Release Control Record

Issue No.	Description	Date Issued
SA180202C21	Original release.	Mar. 01, 2018
SA180202C21 R1	Revise model.	Apr. 10, 2018
SA180202C21 R2	Revise address.	Apr. 13, 2018

1 Certificate of Conformity

Product: Set Top Box

Brand: DirecTV

Test Model: LKR01-C-303

Series Model: LKR01-YY303 ("Y" can be A-Z, "-", or blank, for marketing purpose)

Sample Status: Engineering sample

Applicant: SKARDIN INDUSTRIAL CORP.

Test Date: Feb. 09 ~ Feb. 24, 2018

Standards: FCC Part 2 (Section 2.1091)
KDB 447498 D03 (January 17, 2014)
IEEE C95.1

The above equipment has been tested by **Bureau Veritas Consumer Products Services (H.K.) Ltd., Taoyuan Branch**, and found compliance with the requirement of the above standards. The test record, data evaluation & Equipment Under Test (EUT) configurations represented herein are true and accurate accounts of the measurements of the sample's RF characteristics under the conditions specified in this report.

Prepared by :


Pettie Chen / Senior Specialist

Date: Apr. 13, 2018

Approved by :


Bruce Chen / Project Engineer

Date: Apr. 13, 2018

2 RF Exposure

2.1 Limits for Maximum Permissible Exposure (MPE)

Frequency Range (MHz)	Electric Field Strength (V/m)	Magnetic Field Strength (A/m)	Power Density (mW/cm ²)	Average Time (minutes)
Limits For General Population / Uncontrolled Exposure				
300-1500	F/1500	30
1500-100,000	1.0	30

F = Frequency in MHz

2.2 MPE Calculation Formula

$$P_d = (P_{out} \cdot G) / (4 \cdot \pi \cdot r^2)$$

where

P_d = power density in mW/cm²

P_{out} = output power to antenna in mW

G = gain of antenna in linear scale

π = 3.1416

R = distance between observation point and center of the radiator in cm

2.3 Classification

The antenna of this product, under normal use condition, is at least 20cm away from the body of the user. So, this device is classified as **Mobile Device**.

3 Calculation Result of Maximum Conducted Power

Frequency Band (MHz)	Max Power (dBm)	Antenna Gain (dBi)	Distance (cm)	Power Density (mW/cm ²)	Limit (mW/cm ²)
2412-2462	29.82	5.97	20	0.755	1
5180-5240	22.80	7.42	20	0.209	1
5260-5320	22.65	7.42	20	0.202	1
5500-5700	22.89	7.42	20	0.214	1
5745-5825	22.58	7.42	20	0.199	1

2.4GHz Band: Directional gain = 2.96dBi+10log(2)=5.97dBi

5.0GHz Band: Directional gain = 4.41dBi+10log(2)=7.42dBi

WLAN 2.4GHz & WLAN 5GHz cannot transmit simultaneously.

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