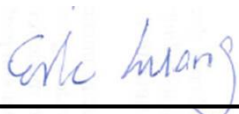


RF Exposure Evaluation Report

APPLICANT : S&R Land LLC
EQUIPMENT : Digital Media Receiver
MODEL NAME : XC56PY
FCC ID : 2ALWB-7232
STANDARD : 47 CFR Part 2.1091

We, SPORTON INTERNATIONAL INC., would like to declare that the device has been evaluated in accordance with 47 CFR Part 2.1091, and pass the limit. Without written approval of SPORTON INTERNATIONAL INC., the test report shall not be reproduced except in full.



Reviewed by: Eric Huang / Manager



Approved by: Jones Tsai / Manager



SPORTON INTERNATIONAL INC.

No.52, Hwa Ya 1st Rd., Hwa Ya Technology Park, Kwei-Shan District, Taoyuan City, Taiwan (R.O.C.)



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**Revision History**

REPORT NO.	VERSION	DESCRIPTION	ISSUED DATE
FA740606-01	Rev. 01	Initial issue of report	Aug. 31, 2017

**1. Administration Data****1.1. Testing Laboratory**

Testing Laboratory	
Test Site	SPORTON INTERNATIONAL INC.
Test Site Location	No.52, Hwa Ya 1st Rd., Hwa Ya Technology Park, Kwei-Shan District, Taoyuan City, Taiwan (R.O.C.) TEL: +886-3-327-3456 FAX: +886-3-328-4978

Applicant	
Company Name	S&R Land LLC
Address	4000 S. Faber Place Drive, Suite 300 Charleston, South Carolina 29405

2. Description of Equipment Under Test (EUT)

Product Feature & Specification	
EUT Type	Digital Media Receiver
Model Name	XC56PY
FCC ID	2ALWB-7232
Wireless Technology and Frequency Range	WLAN 2.4GHz Band: 2412 MHz ~ 2472 MHz WLAN 5.2GHz Band: 5180 MHz ~ 5240 MHz WLAN 5.8GHz Band: 5745 MHz ~ 5825 MHz Bluetooth: 2402 MHz ~ 2480 MHz
Mode	802.11a/b/g/n HT20/HT40 Bluetooth BR/EDR/LE

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

3. Maximum RF average output power among production units

Band / Mode	Average Power (dBm)			
	BR / EDR			LE
	1M	2M	3M	GFSK
Bluetooth	7.5	5.5	5.5	7.5

Band / Channel / Frequency (MHz)			IEEE 802.11 Average Power (dBm)					
			Ant 1			Ant 2		
			11b	11g	HT20	11b	11g	HT20
2.4GHz WLAN (DTS)	Ch 1	2412	19	17	16	20.5	16	15
	Ch 6	2437	19.5	20.5	20.5	20.5	19.5	19.5
	Ch 11	2462	18.5	17	16	19.5	16.5	15.5
	Ch 12	2467	18.5	13	14	18	12.5	12
	Ch 13	2472	16	12.5	11	14.5	10.5	11.5

Band / Channel / Frequency (MHz)			IEEE 802.11 Average Power (dBm)					
			Ant 1			Ant 2		
			11a	HT20	HT40	11a	HT20	HT40
5.2GHz WLAN (U-NII-1)	Ch 36	5180	18.5	18.5		17.5	17.5	
	Ch 38	5190			13			12
	Ch 40	5200	21	21		20	20	
	Ch 44	5220	21	21		20	20	
	Ch 46	5230			19			18
	Ch 48	5240	18.5	19		17.5	17.5	
5.8GHz WLAN (U-NII-3)	Ch 149	5745	20	20		19	19	
	Ch 151	5755			20			19
	Ch 157	5785	20	20		19	19	
	Ch 159	5795			20			19
	Ch 165	5825	20	20		19	19	



4. RF Exposure Limit Introduction

According to ANSI/IEEE C95.1-1992, the criteria listed in Table 1 shall be used to evaluate the environmental impact of human exposure to radio frequency (RF) radiation as specified in §1.1310.

Frequency range (MHz)	Electric field strength (V/m)	Magnetic field strength (A/m)	Power density (mW/cm ²)	Averaging time (minutes)
(A) Limits for Occupational/Controlled Exposures				
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				
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

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:

$$S = \frac{PG}{4\pi R^2}$$

Where:

S = Power Density

P = Output Power at Antenna Terminals

G = Gain of Transmit Antenna (linear gain)

R = Distance from Transmitting Antenna



5. Radio Frequency Radiation Exposure Evaluation

5.1. Standalone Power Density Calculation

Band	Frequency (MHz)	Antenna Gain (dBi)	Maximum Power (dBm)	Maximum EIRP (dBm)	Maximum EIRP (W)	Average EIRP (mW)	Power Density at 20cm (mW/cm ²)	Limit (mW/cm ²)	Power Density / Limit
2.4GHz WLAN	2412.0	3.30	20.50	23.800	0.240	239.883	0.048	1.000	0.048
5GHz WLAN	5180.0	5.60	21.00	26.600	0.457	457.088	0.091	1.000	0.091
Bluetooth	2402.0	3.30	7.50	10.800	0.012	12.023	0.002	1.000	0.002

Note: For conservativeness, the lowest frequency of each band is used to determine the MPE limit of that band.

5.2. Collocated Power Density Calculation

WLAN Power Density / Limit	Bluetooth Power Density / Limit	Σ (Power Density / Limit) of WLAN+Bluetooth
0.091	0.002	0.093

Note:

1. Σ (Power Density / Limit): This is a summation of [(power density for each transmitter/antenna included in the simultaneous transmission)/ (corresponding MPE limit)], for WLAN + Bluetooth.
2. Considering the WLAN module collocation with Bluetooth transmitter of the EIRP performance listed in the table above, the aggregated (power density /limit) is smaller than 1, and MPE of 2 collocated transmitters is compliant

Conclusion:

According to 47 CFR §2.1091, the RF exposure analysis concludes that the RF Exposure is FCC compliant.