RF Exposure Report

TCL OVERSEAS MARKETING LTD

Wireless Subwoofer

Model Number: S55H-SW

Additional Model: S55H1-SW, S55H5-SW, S55H7-SW

IC: 26250-S55HSW

Applicant:	TCL OVERSEAS MARKETING LTD
Address:	5/F, Building 22E, 22 Science Park East Avenue HongKong
	Science Park Shatin Hong Kong
Prepared By:	EST Technology Co., Ltd.
	Chilingxiang, Qishantou, Santun, Houjie, Dongguan, Guangdong, China
Tel: 86-769-83081888-808	

Report Number:	ESTE-R2401404-2
Date of Test:	Jan. 05~25, 2024
Date of Report:	Mar. 31, 2025

Maximum Permissible Exposure

1. Applicable Standard

RSS-102 Issue 5, March 2015

1.1. Limit

RF exposure evaluation is required if the separation distance between the user and/or bystander and the device's radiating element is greater than 20 cm, except when the device operates as follows:

- below 20 MHz and the source-based, time-averaged maximum e.i.r.p. of the device is equal to or less than 1 W (adjusted for tune-up tolerance);
- at or above 20 MHz and below 48 MHz and the source-based, time-averaged maximum e.i.r.p. of the device is equal to or less than $4.49/f^{0.5}$ W (adjusted for tune-up tolerance), where f is in MHz;
- at or above 48 MHz and below 300 MHz and the source-based, time-averaged maximum e.i.r.p. of the device is equal to or less than 0.6 W (adjusted for tune-up tolerance);
- at or above 300 MHz and below 6 GHz and the source-based, time-averaged maximum e.i.r.p. of the device is equal to or less than $1.31 \times 10^{-2}\ f^{0.6834}$ W (adjusted for tune-up tolerance), where f is in MHz;
- at or above 6 GHz and the source-based, time-averaged maximum e.i.r.p. of the device is equal to or less than 5 W (adjusted for tune-up tolerance).

For example

Frequency (MHz)	EIRP (W)	EIRP (dBm)
920	1.39	31.43
850	1.32	31.19
1900	2.28	33.58
2450	2.71	34.33
5200	4.54	36.57

2. Conducted Power Result

Mode	Frequency (MHz)	Peak output power (dBm)	Peak output power (mW)
SRD 1M	2402	6.54	4.5082
	2440	6.14	4.1115
	2480	5.76	3.7670
SRD 2M	2402	6.53	4.4978
	2440	6.09	4.0644
	2480	5.74	3.7497

3. Calculated Result and Limit

Mode	Peak output power (dBm)	Ant. gain (dBi)	E.I.R.P (dBm)	Ture-up power (dBm)	Max Ture-up power		Limit (W)	Test Result
					(dBm)	(W)		
SRD 1M	6.54	1.69	8.23	8±1	9	0.0079	2.676	Complies
SRD 2M	6.53	1.69	8.22	8±1	9	0.0079	2.676	Complies

1. Limited= 1.31×10^{-2} $f^{0.6834}$ W (where f is in MHz);
2. We choose 2402MHz(Lowest frequency operate at Bluetooth) to calculate MPE limit as higher frequency will have higher MPE limits.

End of Test Report