




FCC RF Test Report

APPLICANT : Elo Touch Solutions, Inc.
EQUIPMENT : Mobile POS
BRAND NAME : ELO or 
MODEL NAME : EMC0600
FCC ID : RBWEMC0600
STANDARD : 47 CFR Part 15 Subpart C §15.225
 47 CFR Part 15 Subpart C §15.247
 47 CFR Part 15 Subpart E §15.407

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

Alex Wang

Approved by: Alex Wang / Manager



Sporton International (Kunshan) Inc.

**No. 1098, Pengxi North Road, Kunshan Economic Development Zone Jiangsu Province 215300
People's Republic of China**



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REVISION HISTORY

REPORT NO.	VERSION	DESCRIPTION	ISSUED DATE
142804A	Rev. 01	Initial issue of report	Sep. 03, 2021



1 General Description


1.1 Applicant

Elo Touch Solutions, Inc.
670 N. McCarthy Blvd. Suite 100, Milpitas, CA 95035, United States

1.2 Manufacturer

Elo Touch Solutions, Inc.
670 N. McCarthy Blvd. Suite 100, Milpitas, CA 95035, United States

1.3 Product Feature of Equipment Under Test

Product Feature	
Equipment	Mobile POS
Brand Name	ELOor 
Model Name	EMC0600
FCC ID	RBWEMC0600
HW Version	A01
SW Version	5.07.100
EUT Stage	Production Unit

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 Modification of EUT

No modifications are made to the EUT during all test items.



1.5 Testing Location

Sporton International (Kunshan) Inc. is accredited to ISO/IEC 17025:2017 by American Association for Laboratory Accreditation with Certificate Number 5145.02.

Test Firm	Sporton International (Kunshan) Inc.		
Test Site Location	No. 1098, Pengxi North Road, Kunshan Economic Development Zone Jiangsu Province 215300 People's Republic of China TEL : +86-512-57900158 FAX : +86-512-57900958		
Test Site No.	Sporton Site No.	FCC Designation No.	FCC Test Firm Registration No.
	TH01-KS 03CH05-KS	CN1257	314309

1.6 Test Software

Item	Site	Manufacturer	Name	Version
1.	03CH05-KS	AUDIX	E3	6.2009-8-24al



2 Re-use of Measured Data

2.1 Introduction Section

This application re-uses data collected on a similar device. The subject device of this application (Model: EMC0600, FCC ID: RBWEMC0600) is electrically identical to the reference device (Model: EMC0600C, FCC ID: RBWEMC0600C) for the portions of the circuitry corresponding to the data being re-used. Based on their similarity, the FCC Part 15C (equipment class: DTS, DSS, DXX), Part15E and DFS reuse the original model's result and do spot-check, following the FCC KDB 484596 D01 v01.

The applicant takes full responsibility that the test data as referenced in this report represent compliance for this FCC ID: RBWEMC0600 .

2.2 Model Difference Information

The main difference between FCC ID: RBWEMC0600C and FCC ID: RBWEMC0600 is as below:

- Remove WWAN and GNSS function.

Other differences and all the details of similarity and difference can be found in the confidential documents.

2.3 Reference detail Section:

Rule Part	Equipment Class	Frequency Band (MHz)	Reference FCC ID(Parent)	Type Grant/ Permissive Change	Reference Title	FCC ID Filling (Variant)	Report Title/Section
15C	DSS (BR/EDR)	2400~2483.5	RBWEMC0600C	Original Grant	FR142804-01A	RBWEMC0600	All sections applicable
	DTS (BLE)	2400~2483.5	RBWEMC0600C	Original Grant	FR142804-01B	RBWEMC0600	All sections applicable
	DTS (WLAN)	2400~2483.5	RBWEMC0600C	Original Grant	FR142804-01C	RBWEMC0600	All sections applicable
	DXX (NFC)	13.56	RBWEMC0600C	Original Grant	FR142804-01D	RBWEMC0600	All sections applicable
15E	U-NII-1	5150~5250	RBWEMC0600C	Original Grant	FR142804-01E	RBWEMC0600	All sections applicable
	U-NII-2A	5250~5350	RBWEMC0600C	Original Grant	FR142804-01E	RBWEMC0600	All sections applicable
	U-NII-2C	5470~5725	RBWEMC0600C	Original Grant	FR142804-01E	RBWEMC0600	All sections applicable
	U-NII-3	5725~5850	RBWEMC0600C	Original Grant	FR142804-01F	RBWEMC0600	All sections applicable
	DFS	5250~5350/ 5470~5725	RBWEMC0600C	Original Grant	FZ142804-01	RBWEMC0600	All sections applicable



2.4 Spot Check Verification Data Section

Conducted power test and radiated spurious emission testt against the variant model based on the worst-case condition from the original model was performed in this filing to demonstrate the test data from original model remains representative for the variant model

Summary for power and RSE spot check for each rule entry and technology is listed as below:

Test Item	Mode	RBWEMC0600C Parent Worst Result	RBWEMC0600 Variant Check Result	Difference (dB)
Conducted Power (dBm)	BT BR/EDR	10.61	10.54	0.07
	BLE v4.2	4.88	4.85	0.03
	BLE v5.0	5.15	5.08	0.07
	802.11b	19.41	18.73	0.68
	802.11g	17.42	17.28	0.14
	11n HT20	20.47	20.02	0.45
	11n HT40	22.10	21.51	0.59
	11a, 5.2GHz	12.27	12.20	0.07
	11n HT20, 5.2GHz	15.24	15.22	0.02
	11n HT40, 5.2GHz	14.43	14.42	0.01
	11ac VHT80, 5.2GHz	13.00	12.90	0.1
	11a, 5.3GHz	12.52	12.48	0.04
	11n HT20, 5.3GHz	15.45	15.40	0.05
	11n HT40, 5.3GHz	14.58	14.56	0.02
	11ac VHT80, 5.3GHz	13.42	13.38	0.04
	11a, 5.5GHz	12.01	11.93	0.08
	11n HT20, 5.5GHz	15.15	15.08	0.07
	11n HT40, 5.5GHz	14.32	14.28	0.04
	11ac VHT80, 5.5GHz	13.11	13.05	0.06
	11a, 5.8GHz	12.19	12.13	0.06
11n HT20, 5.8GHz	15.22	15.17	0.05	
11n HT40, 5.8GHz	14.36	14.34	0.02	
11ac VHT80, 5.8GHz	13.06	13.01	0.05	

Test Item	Mode	RBWEMC0600C Parent Worst Result	RBWEMC0600 Variant Check Result	Difference (dB)
Radiated Spurious Emission (dBuV/m) @ 3m	BT BR/EDR_Tx_Ch78	57.54	59.77	2.23
	BLE v4.2_Tx_Ch39	46.83	46.84	0.01
	BLE v5.0_Tx_Ch39	48.26	48.62	0.36
	11n HT40_Tx_Ch06	50.78	50.4	0.38
	11ac VHT80_Tx_Ch106	50.86	50.28	0.58
	11n HT20_Tx_CH165	54.68	54.37	0.31

Conclusion:

Radiated spurious emission test against the variant model based on the worst-case condition from the original model was performed in this filing to demonstrate the test data from original model remains representative for the variant model.

Based on the spot check test result, the test data from the original model is representative for the variant model. The power level and RSE spot check are shown within expected level compliant to limit line.

We are using power and ERP/EIRP measurements from the original parent model reports to list on the grant.

The same DFS detection EUD mechanism/software is used in the variant. Hence, there is no spot



check data for DFS EUD hand-shaking mechanism.

We confirm that the test data reuse policy of FCC KDB 484596 D01 Referencing Test Data v01 has been followed and the test data as referenced from the parent model report represents compliance with new FCC ID.



3 List of Measuring Equipment

Instrument	Manufacturer	Model No.	Serial No.	Characteristics	Calibration Date	Test Date	Due Date	Remark
Spectrum Analyzer	R&S	FSV40	101040	10Hz~40GHz	Nov. 01, 2020	Aug. 17, 2021	Oct. 31, 2021	Conducted (TH01-KS)
Pulse Power Sensor	Anritsu	MA2411B	0917070	300MHz~40GHz	Jan. 07, 2021	Aug. 17, 2021	Jan. 06, 2022	Conducted (TH01-KS)
Power Meter	Anritsu	ML2495A	1005002	50MHz Bandwidth	Jan. 07, 2021	Aug. 17, 2021	Jan. 06, 2022	Conducted (TH01-KS)
EMI Test Receiver	Keysight	N9038A	MY56400004	3Hz~8.5GHz;Max 30dBm	Oct. 17, 2020	Jun. 13, 2021	Oct. 16, 2021	Radiation (03CH05-KS)
EXA Spectrum Analyzer	Keysight	N9010A	MY55150244	10Hz~44G,MAX 30dB	Apr. 13, 2021	Jun. 13, 2021	Apr. 12, 2022	Radiation (03CH05-KS)
Loop Antenna	R&S	HFH2-Z2	100321	9kHz~30MHz	Nov. 01, 2020	Jun. 13, 2021	Oct. 31, 2021	Radiation (03CH05-KS)
Bilog Antenna	TeseQ	CBL6111D	49922	30MHz-1GHz	May 30, 2021	Jun. 13, 2021	May 29, 2022	Radiation (03CH05-KS)
Double Ridge Horn Antenna	ETS-Lindgren	3117	00218652	1GHz~18GHz	Apr. 24, 2021	Jun. 13, 2021	Apr. 23, 2022	Radiation (03CH05-KS)
SHF-EHF Horn	Com-power	AH-840	101115	18GHz~40GHz	Nov. 10, 2020	Jun. 13, 2021	Nov. 09, 2021	Radiation (03CH05-KS)
Amplifier	SONOMA	310N	187289	9KHz-1GHz	Apr. 12, 2021	Jun. 13, 2021	Apr. 11, 2022	Radiation (03CH05-KS)
Amplifier	MITEQ	EM18G40GGA	060728	18~40GHz	Jan. 07, 2021	Jun. 13, 2021	Jan. 06, 2022	Radiation (03CH05-KS)
high gain Amplifier	MITEQ	AMF-7D-00101800-30-10P	2012228	1Ghz-18Ghz	Oct. 17, 2020	Jun. 13, 2021	Oct. 16, 2021	Radiation (03CH05-KS)
Amplifier	Keysight	83017A	MY53270316	500MHz~26.5GHz	Oct. 17, 2020	Jun. 13, 2021	Oct. 16, 2021	Radiation (03CH05-KS)
AC Power Source	Chroma	61601	F104090004	N/A	NCR	Jun. 13, 2021	NCR	Radiation (03CH05-KS)
Turn Table	ChamPro	EM 1000-T	060762-T	0~360 degree	NCR	Jun. 13, 2021	NCR	Radiation (03CH05-KS)
Antenna Mast	ChamPro	EM 1000-A	060762-A	1 m~4 m	NCR	Jun. 13, 2021	NCR	Radiation (03CH05-KS)

NCR: No Calibration Required

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