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DATE: 23 January 2014

I.T.L. (PRODUCT TESTING) LTD.

**Test Report According to
47CFR18**

for

El Global Trade Ltd.

Equipment under test:

OTC Home Use Device

sensiLiftST100

Written by:

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Approved by:

I. Raz, EMC Laboratory Manager

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This report relates only to items tested.



Measurement/Technical Report for El Global Trade Ltd.

OTC Home Use Device

sensiLiftST100

FCC ID: 2ABRVSENSILIFTST100

This report concerns: Original Grant: x
Class I change:
Class II change:

Equipment type: Part 18

47CFR18 Section 18.305(b)

Measurement procedure used is ANSI C63.4-2003 and MP5 1986.

Application for Certification
prepared by:
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1. General Information

1.1 Administrative Information

Manufacturer:	El Global Trade Ltd.
Manufacturer's Address:	4 Hatzoran St., Netanya, 4250604 Israel Tel: +972-9-788-9067 Fax: +972-9-773-4831
Manufacturer's Representative:	Eitan Blaich
Equipment Under Test (E.U.T):	OTC Home Use Device
Equipment Model No.:	sensiLiftST100
Equipment Serial No.:	001
Date of Receipt of E.U.T:	31.12.13
Start of Test:	31.12.013
End of Test:	02.01.14
Test Laboratory Location:	I.T.L (Product Testing) Ltd. Kfar Bin Nun, ISRAEL 997800
Test Specifications:	FCC Part 18 Subpart C



1.2 List of Accreditations

The EMC laboratory of I.T.L. is accredited by the following bodies:

1. The American Association for Laboratory Accreditation (A2LA) (U.S.A.), Certificate No. 1152.01.
2. The Federal Communications Commission (FCC) (U.S.A.), Registration No. 90715.
3. The Israel Ministry of the Environment (Israel), Registration No. 1104/01.
4. Industry Canada (Canada), IC File No.: 46405-4025; Site No. IC 4025B-1.

I.T.L. Product Testing Ltd. is accredited by the American Association for Laboratory Accreditation (A2LA) and the results shown in this test report have been determined in accordance with I.T.L.'s terms of accreditation unless stated otherwise in the report.

1.3 Product Description

The SensiLift device is an OTC home use device intended for wrinkle reduction and elasticity renewal based on selective electrothermolysis (Radio Frequency) combined with mechanical massage for immediate relaxation of facial skin.

The nominal operating frequency of the E.U.T. is 1 MHz.

The maximum RF energy generated by the E.U.T. is 10 Watts.

The electrical power requirements are 9 VDC/1.5A provided by an AC/DC adapter.

1.4 Test Methodology

Both conducted and radiated testing were performed according to the procedures in ANSI C63.4: 2003 and MP5 1986. Radiated testing was performed at an antenna to EUT distance of 3 meters.

1.5 Test Facility

The radiated emissions tests were performed at I.T.L.'s testing facility at Kfar Bin-Nun, Israel. This site is a FCC listed test laboratory (FCC Registration No. 90715, date of listing November 21, 2012).

I.T.L.'s EMC Laboratory is also accredited by A2LA, certificate No. 1152.01.

1.6 Measurement Uncertainty

Conducted Emission

Conducted Emission (CISPR 11, EN 55011, CISPR 22, EN 55022, ANSI C63.4) 0.15 – 30 MHz:

Expanded Uncertainty (95% Confidence, K=2):

± 3.44 dB

Radiated Emission

Radiated Emission (CISPR 11, EN 55011, CISPR 22, EN 55022, ANSI C63.4) for open site 30-1000MHz:

Expanded Uncertainty (95% Confidence, K=2):

± 4.96 dB

2. System Test Configuration

2.1 Justification

The E.U.T. motor was operated at Max speed: Level 2, and RF was set at Max: Level 3.

Radiated emission screening was performed in 3 orthogonal orientations. The worst case orientation was the vertical position.

2.2 Special Accessories

No special accessories were needed.

2.3 Equipment Modifications

No modifications were needed in order to achieve compliance

2.4 Configuration of Tested System

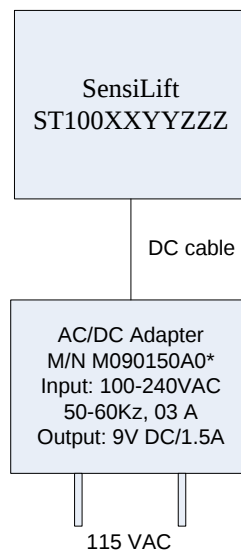


Figure 1. Configuration of Tested System

3. Conducted and Radiated Measurement Test Set-up Photo



Figure 2. Conducted Emission Test



Figure 3. Radiated Emission Test

4. Conducted Emission From AC Mains

4.1 Test Specification

FCC, Part 18, Subpart C Section 18.307(b)

4.2 Test Procedure

The E.U.T operation mode and test set-up are as described in Section 2. In order to minimize background noise interference, the conducted emission testing was performed inside a shielded room, with the E.U.T placed on an 0.8 meter high wooden table, 0.4 meter from the room's vertical wall.

The E.U.T was powered via a 50 Ohm / 50 μ Hn Line Impedance Stabilization Network (LISN) on the phase and neutral lines. The LISN's were grounded to the shielded room ground plane (floor), and were kept at least 0.8 meters from the nearest boundary of the E.U.T

The center of the E.U.T AC cable was folded back and forth, in order to form a bundle less than 0.40 meters and a total cable length of 1 meter.

The emission voltages at the LISN's outputs were measured using a computerized receiver, complying with CISPR 16 requirements. The specification limits are pre-loaded to the receiver and are displayed on the receiver's spectrum display.

A frequency scan between 0.15 and 30 MHz was performed at 9 kHz I.F. band width, and using peak detection.

The spectral components having the highest level on each line were measured using a quasi-peak and average detector.

4.3 Test Results

JUDGEMENT: Passed by 19.1 dB

The margin between the emission levels and the specification limit is, in the worst case, 19.1 dB for the phase line at 0.15 MHz and 19.8 dB at 0.15 MHz for the neutral line.

The EUT met the FCC Part 18, Subpart C specification requirements.

The details of the highest emissions are given in *Figure 4* to *Figure 7*.

TEST PERSONNEL:

Tester Signature: 

Date: 26.01.14

Typed/Printed Name: D. Yadidi

Conducted Emission

E.U.T Description OTC Home Use Device
Type sensiLiftST100
Serial Number: 001

Specification: FCC Part 18, Subpart C

Lead: Phase

Detectors: Quasi-peak, Average

EDIT PEAK LIST (Final Measurement Results)				
Trace1:	CE22BQP			
Trace2:	CE22BAP			
Trace3:	---			
	TRACE	FREQUENCY	LEVEL dBμV	DELTA LIMIT dB
2	Average	150 kHz	26.47	-29.53
1	Quasi Peak	154 kHz	46.68	-19.09
1	Quasi Peak	258 kHz	36.72	-24.76
2	Average	258 kHz	20.13	-31.36
1	Quasi Peak	602 kHz	19.02	-36.97
2	Average	630 kHz	16.91	-29.08
1	Quasi Peak	998 kHz	20.85	-35.14
2	Average	1.002 MHz	17.15	-28.84
2	Average	2.114 MHz	16.33	-29.66
1	Quasi Peak	2.118 MHz	20.06	-35.93
1	Quasi Peak	2.75 MHz	20.52	-35.47
2	Average	2.762 MHz	16.97	-29.02
1	Quasi Peak	3.574 MHz	16.17	-39.83
2	Average	4.002 MHz	11.97	-34.02
2	Average	7.006 MHz	15.11	-34.88
1	Quasi Peak	7.01 MHz	19.20	-40.79
2	Average	12.006 MHz	23.59	-26.40
1	Quasi Peak	12.01 MHz	32.48	-27.51
2	Average	14.01 MHz	19.92	-30.08
1	Quasi Peak	14.014 MHz	30.51	-29.49

Figure 4. Detectors: Quasi-peak, Average

Note: DELTA LIMIT refers to the test results obtained minus specified requirement; thus a positive number indicates failure, and a negative result indicates that the product passes the test.

Conducted Emission

E.U.T Description OTC Home Use Device
Type sensiLiftST100
Serial Number: 001

Specification: FCC Part 18, Subpart C
Lead: Phase
Detectors: Quasi-peak, Average

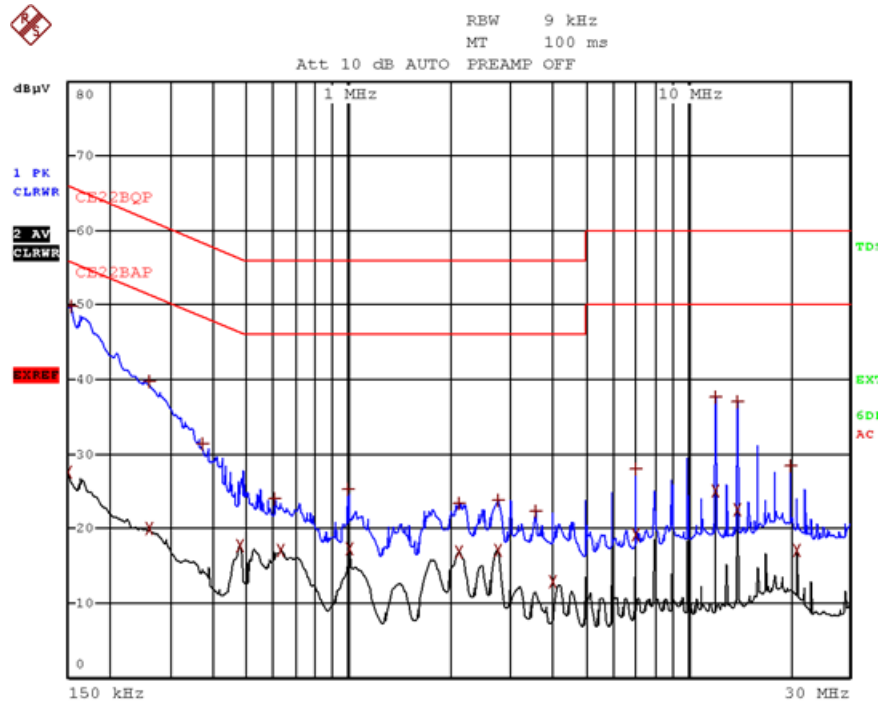


Figure 5. Detectors: Quasi-peak, Average

Conducted Emission

E.U.T Description OTC Home Use Device
Type sensiLiftST100
Serial Number: 001

Specification: FCC Part 18, Subpart C
Lead: Neutral
Detectors: Quasi-peak, Average

EDIT PEAK LIST (Final Measurement Results)				
Trace1:	CE22BQF			
Trace2:	CE22BAP			
Trace3:	---			
	TRACE	FREQUENCY	LEVEL dBμV	DELTA LIMIT dB
1	Quasi Peak	154 kHz	46.01	-19.76
2	Average	206 kHz	21.25	-32.10
1	Quasi Peak	246 kHz	37.25	-24.63
2	Average	350 kHz	17.28	-31.67
2	Average	494 kHz	20.50	-25.60
1	Quasi Peak	502 kHz	23.82	-32.17
1	Quasi Peak	630 kHz	18.16	-37.83
2	Average	802 kHz	18.19	-27.80
1	Quasi Peak	1.002 MHz	22.25	-33.74
2	Average	1.218 MHz	18.56	-27.43
2	Average	1.37 MHz	14.57	-31.42
1	Quasi Peak	1.542 MHz	16.61	-39.38
2	Average	2.25 MHz	18.69	-27.30
1	Quasi Peak	2.622 MHz	20.83	-35.16
2	Average	3.698 MHz	14.57	-31.42
1	Quasi Peak	4.006 MHz	15.90	-40.10
2	Average	7.002 MHz	17.19	-32.80
1	Quasi Peak	7.006 MHz	22.11	-37.88
1	Quasi Peak	12.01 MHz	31.89	-28.10
2	Average	12.01 MHz	17.89	-32.10

Figure 6. Detectors: Quasi-peak, Average

Note: DELTA LIMIT refers to the test results obtained minus specified requirement; thus a positive number indicates failure, and a negative result indicates that the product passes the test.

Conducted Emission

E.U.T Description OTC Home Use Device
Type sensiLiftST100
Serial Number: 001

Specification: FCC Part 18, Subpart C
Lead: Neutral
Detectors: Quasi-peak, Average

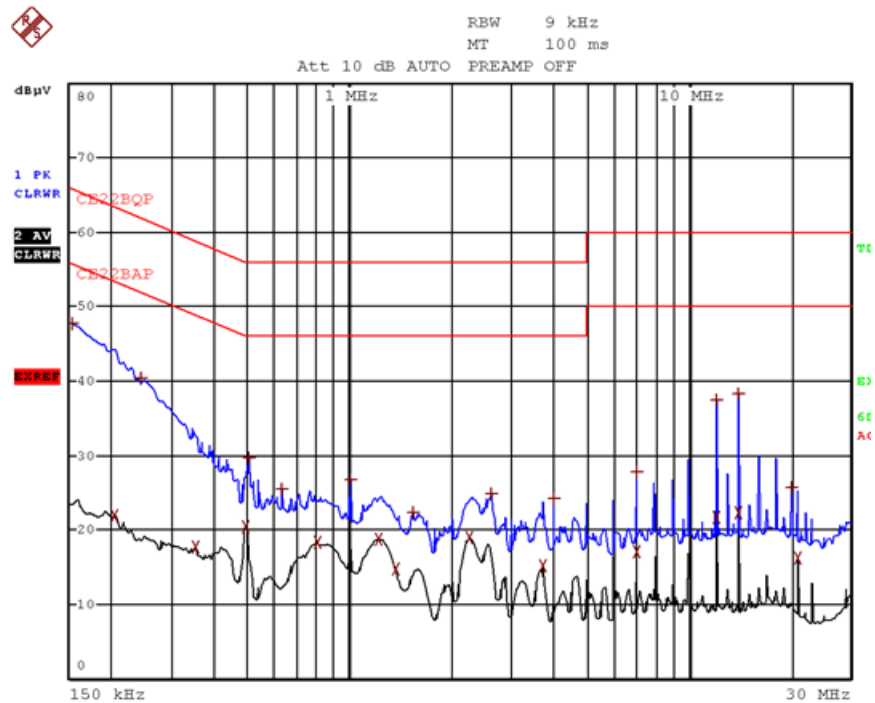


Figure 7 Detectors: Quasi-peak, Average



4.4 Test Equipment Used, Conducted Emission From AC Mains

Instrument	Manufacturer	Model	Serial No.	Last Calibration Date	Period
LISN	Fischer	FCC-LISN-2A	127	December 12, 2013	1 Year
EMI Receiver	Rohde & Schwarz	ESCI7	100724	December 27, 2013	1 Year

5. Spurious Radiated Emission, 9 kHz – 30 MHz

5.1 Test Specification

9 kHz-30 MHz, FCC, Part 18, Subpart C, Section 18.305(b)

5.2 Test Procedure

The E.U.T. operation mode and test set-up are as described in Section 2.

A preliminary measurement to characterize the E.U.T was performed inside the shielded room at a distance of 3 meters, using peak detection mode and broadband antennas. The preliminary measurements produced a list of the highest emissions. The E.U.T was then transferred to the open site, and placed on a remote-controlled turntable. The E.U.T was placed on a non-metallic table, 0.8 meters above the ground. The configuration tested is shown in Figure 1.

The frequency range 9 kHz-30 MHz was scanned.

The emissions were measured using a computerized EMI receiver complying to CISPR 16 requirements. The specification limits and applicable correction factors are loaded to the receiver via a 3.5" floppy disk.

In the frequency range 9 kHz-30MHz, the loop antenna was rotated on its vertical axis. The antenna height (center of loop) was 1 meter at a distance of 3 meters.

The E.U.T. was operated at the frequency of 1 MHz. This frequency was measured using a peak detector.

5.3 Test Results

JUDGEMENT: Passed by 56.0 dB

The EUT met the requirements of the FCC Part 18, Subpart C, specification.

The margin between the emission levels and the specification limit is, in the worst case, 56.0 dB at 1.0 MHz.

TEST PERSONNEL:

Tester Signature: 

Date: 26.01.14

Typed/Printed Name: A. Sharabi

Radiated Emission

E.U.T Description OTC Home Use Device
Type sensiLiftST100
Serial Number: 001

Specification: FCC Part 18, Subpart C

Antenna: 3 meters distance

Frequency range: 9 kHz to 30 MHz

Detector: Peak

Frequency (MHz)	Peak Reading (dB μ V/m)	Limit (dB μ V/m)	Margin (dB)
1.0	47.5	103.5	-56.0
3.0	40.6	103.5	-62.9
20.0	38.6	103.5	-64.9

Figure 8. Detector: Peak

Notes:

1. *Margin refers to the test results obtained minus specified requirement; thus a positive number indicates failure, and a negative result indicates that the product passes the test.*
2. *FCC Limit at 300 meters = 15 μ V/m = 23.5 dB μ V/m*
3. *FCC Limit at 30 meters = 20 log 300/30 = 40 dB + 23.5 dB μ V/m = 63.5 dB μ V/m.*
4. *FCC Limit at 3 meters = 20 log 30/3 = 40 dB + 63.5 dB μ V/m = 103.5 dB μ V/m.*

5.4 Test Equipment Used, Spurious Radiated Emission, 9 kHz - 30 MHz

Instrument	Manufacturer	Model	Serial Number	Calibration	Period
EMI Receiver	HP	85422E	3906A00276	February 26, 2013	1 year
RF Section	HP	85420E	3705A00248	February 26, 2013	1 year
Active Loop Antenna	EMCO	6502	9506-2950	November 4, 2013	1 year
Antenna Mast	ARA	AAM-4A	1001	N/A	N/A
Turntable	ARA	ART-1001/4	1001	N/A	N/A
Mast & Table Controller	ARA	ACU-2/5	1001	N/A	N/A

5.5 Field Strength Calculation

The field strength is calculated directly by the EMI Receiver software, and a "Correction Factors" data disk, using the following equation:

$$FS = RA + AF + CF$$

FS: Field Strength [dB μ V/m]
 RA: Receiver Amplitude [dB μ V]
 AF: Receiving Antenna Correction Factor [dB/m]
 CF: Cable Attenuation Factor [dB]

Example: FS = 30.7 dB μ V (RA) + 14.0 dB (AF) + 0.9 dB (CF) = 45.6 dB μ V

No external pre-amplifiers are used.

6. APPENDIX A - CORRECTION FACTORS

6.1 Correction factors for CABLE from EMI receiver to test antenna at 3 meter range.

FREQUENCY (MHz)	CORRECTION FACTOR (dB)	FREQUENCY (MHz)	CORRECTION FACTOR (dB)
10.0	0.3	1200.0	7.3
20.0	0.6	1400.0	7.8
30.0	0.8	1600.0	8.4
40.0	0.9	1800.0	9.1
50.0	1.1	2000.0	9.9
60.0	1.2	2300.0	11.2
70.0	1.3	2600.0	12.2
80.0	1.4	2900.0	13.0
90.0	1.6		
100.0	1.7		
150.0	2.0		
200.0	2.3		
250.0	2.7		
300.0	3.1		
350.0	3.4		
400.0	3.7		
450.0	4.0		
500.0	4.3		
600.0	4.7		
700.0	5.3		
800.0	5.9		
900.0	6.3		
1000.0	6.7		

NOTES:

1. The cable type is RG-214.
2. The overall length of the cable is 27 meters.
3. The above data is located in file 27MO3MO.CBL on the disk marked "Radiated Emission Tests EMI Receiver".

6.2 Correction factors for ACTIVE LOOP ANTENNA

Model 6502

S/N 9506-2950

FREQUENCY	Magnetic Antenna Factor	Electric Antenna Factor
(MHz)	(dB)	(dB)
.009	-35.1	16.4
.010	-35.7	15.8
.020	-38.5	13.0
.050	-39.6	11.9
.075	-39.8	11.8
.100	-40.0	11.6
.150	-40.0	11.5
.250	-40.0	11.6
.500	-40.0	11.5
.750	-40.1	11.5
1.000	-39.9	11.7
2.000	-39.5	12.0
3.000	-39.4	12.1
4.000	-39.7	11.9
5.000	-39.7	11.8
10.000	40.2	11.3
15.000	-40.7	10.8
20.000	-40.5	11.0
25.000	-41.3	10.2
30.000	42.3	9.2