



DEPARTMENT OF HEALTH CARE ACCESS AND INFORMATION  
OFFICE OF STATEWIDE HOSPITAL PLANNING AND DEVELOPMENT

**APPLICATION FOR HCAI SPECIAL SEISMIC  
CERTIFICATION PREAPPROVAL (OSP)**

OFFICE USE ONLY

APPLICATION #: OSP-0819

**HCAI Special Seismic Certification Preapproval (OSP)**

Type:  New  Renewal

**Manufacturer Information**

Manufacturer: Eaton Corporation

Manufacturer's Technical Representative: Liu Huiyun

Mailing Address: 3301 Spring Forest Road, Raleigh, NC 27616

Telephone: (860) 755-2757 Email: HuiyunLiu@Eaton.com

**Product Information**

Product Name: Eaton 93Li

Product Model Number(s): Varies, see product table

Product Category: UPS and Batteries

Product Sub-Category: Batteries

General Description: Lithium Ion Battery Cabinets

Mounting Description: Base Mounted Rigid -

Tested Seismic Enhancements: None

**Applicant Information**

Applicant Company Name: Pre Compliance

Contact Person: Galen Reid

Mailing Address: 36 SW Wall St, Bend, OR 97702

Telephone: (541) 241-2310 Email: galen@go-pre.com

Title: Principal & Program Manager





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**California Licensed Structural Engineer Responsible for the Engineering and Test Report(s)**

Company Name: PRE COMPLIANCE

Name: Andrew Coughlin California License Number: S6082

Mailing Address: 36 SW Wall Street, Bend, OR 97702

Telephone: (415) 635-8461 Email: Andy@go-pre.com

**Certification Method**

GR-63-Core  ICC-ES AC156  IEEE 344  IEEE 693  NEBS 3

Other (Please Specify): \_\_\_\_\_

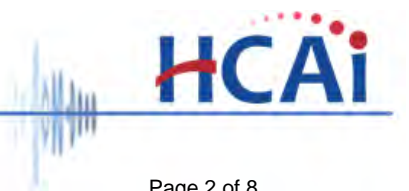
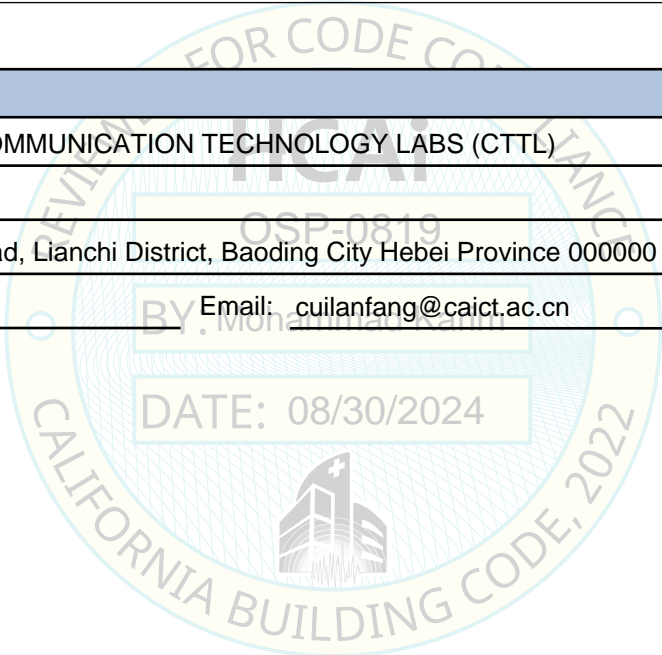
**Testing Laboratory**

Company Name: CHINA TELECOMMUNICATION TECHNOLOGY LABS (CTTL)

Contact Person: Cuilan Fang

Mailing Address: 299 Tengfei Road, Lianchi District, Baoding City Hebei Province 000000

Telephone: (8603) 126-7989 Email: cuilanfang@caict.ac.cn





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**Seismic Parameters**

Design Basis of Equipment or Components ( $F_p/W_p$ ) = 1.13 at z/h=0, 1.44 at z/h=1

SDS (Design spectral response acceleration at short period, g) = 2.0 at z/h=1.0, 2.50 at z/h =0

$a_p$  (Amplification factor) = 2.5

$R_p$  (Response modification factor) = 6.0

$\Omega_0$  (System overstrength factor) = 2.0

$I_p$  (Importance factor) = 1.5

z/h (Height ratio factor) = 1 and 0

Natural frequencies (Hz) = See Attachment

Overall dimensions and weight = See Attachment

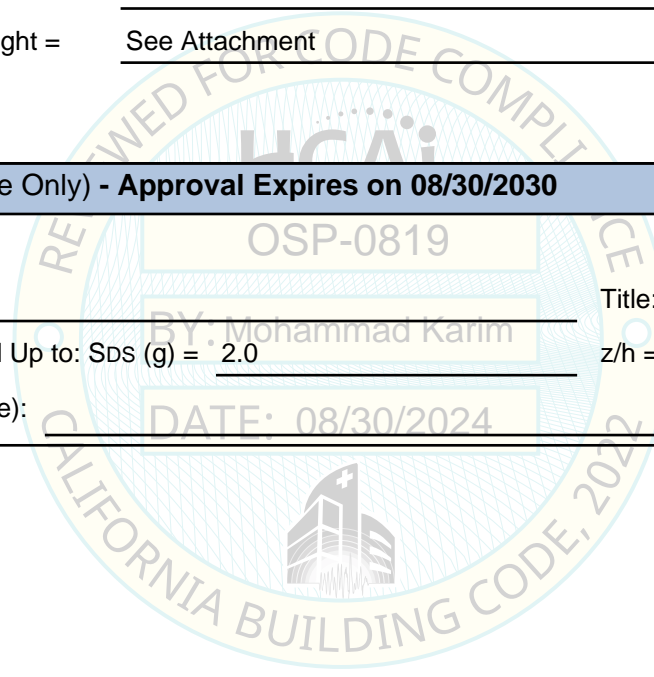
**HCAI Approval (For Office Use Only) - Approval Expires on 08/30/2030**

Date: 8/30/2024

Name: Mohammad Karim Title: Supervisor, Health Facilities

Special Seismic Certification Valid Up to: SDS (g) = 2.0 z/h = 1

Condition of Approval (if applicable): DATE: 08/30/2024





# SPECIAL SEISMIC CERTIFICATION CERTIFIED COMPONENTS

Pre No. CC241390-01-R0

**Manufacturer:** Eaton Corporation  
**Product Type:** Lithium-Ion Battery Cabinets  
**Model Line:** 93Li

**Seismic Parameters**  
 $S_{DS} = 2.0g$  for  $z/h=1$   
 $S_{DS} = 2.5g$  for  $z/h=0$   
 $I_p = 1.5$

**Building Codes**  
**CBC 2022**

## TABLE 1 Mounting Configuration: Base Mounted - Rigid

### Construction Summary

Carbon steel frame and enclosure

### Options Summary

8-12 Battery Modules. 2 or 3 lines. Optional HMI screen (PBFA) suffix).

Model Line	Model	Max. Dimensions (in)			Wt. (lb)	Notes	UUT
		D	W	H			
93Li Lithium-Ion Battery Cabinets	93Li128S-100Ah-2PBFA	35.4	23.6	78.7	1665	8 Modules, 2 line (DC+, DC-)	Interp.
	93Li144S-100Ah-2PBFA	35.4	23.6	78.7	1786	9 Modules, 2 line (DC+, DC-)	Interp.
	93Li160S-100Ah-2PBFA	35.4	23.6	78.7	1907	10 Modules, 2 line (DC+, DC-)	Interp.
	93Li176S-100Ah-2PBFA	35.4	23.6	78.7	2017	11 Modules, 2 line (DC+, DC-)	Interp.
	93Li192S-100Ah-2PBFA	35.4	23.6	78.7	2129	12 Modules, 2 line (DC+, DC-)	Interp.
	93Li128S-100Ah-3PBFA	35.4	23.6	78.7	1665	8 Modules, 3 line (DC+, N, DC-)	Interp.
	93Li160S-100Ah-3PBFA	35.4	23.6	78.7	1907	10 Modules, 3 line (DC+, N, DC-)	Interp.
	93Li192S-100Ah-3PBFA	35.4	23.6	78.7	2129	12 Modules, 3 line (DC+, N, DC-)	1
	93Li128S-100Ah-2SBFA	35.4	23.6	78.7	1665	8 Modules, 2 line (DC+, DC-)	Interp.
	93Li144S-100Ah-2SBFA	35.4	23.6	78.7	1786	9 Modules, 2 line (DC+, DC-)	Interp.
	93Li160S-100Ah-2SBFA	35.4	23.6	78.7	1907	10 Modules, 2 line (DC+, DC-)	Interp.
	93Li176S-100Ah-2SBFA	35.4	23.6	78.7	1989	11 Modules, 2 line (DC+, DC-)	2
	93Li192S-100Ah-2SBFA	35.4	23.6	78.7	2129	12 Modules, 2 line (DC+, DC-)	Interp.
	93Li128S-100Ah-3SBFA	35.4	23.6	78.7	1665	8 Modules, 3 line (DC+, N, DC-)	Interp.
	93Li160S-100Ah-3SBFA	35.4	23.6	78.7	1907	10 Modules, 3 line (DC+, N, DC-)	Interp.
93Li192S-100Ah-3SBFA	35.4	23.6	78.7	2129	12 Modules, 3 line (DC+, N, DC-)	Interp.	

Manufacturer: Eaton Corporation  
 Product Type: Batteries  
 Model Line: 93Li

**Seismic Parameters**

$S_{DS} = 2.0g$  for  $z/h=1$        $I_p = 1.5$   
 $S_{DS} = 2.5g$  for  $z/h=0$

**Building Codes**

**CBC 2022**

## TABLE 2

Table Description: Subcomponents

Component (Manufacturer)	Model	Description	Notes	UUT
Battery Module (Eaton)	U-M48104PSA1			1,2
HMI Screen (Eaton)	2DGXNA80480KEW070_1001_T_E4			1
Enclosure (Eaton)	G93LiR13002			1,2

