



DEPARTMENT OF HEALTH CARE ACCESS AND INFORMATION
FACILITIES DEVELOPMENT DIVISION

APPLICATION FOR HCAI SPECIAL SEISMIC
CERTIFICATION PREAPPROVAL (OSP)

OFFICE USE ONLY

APPLICATION #: OSP-0750

HCAI Special Seismic Certification Preapproval (OSP)

Type: New Renewal

Manufacturer Information

Manufacturer: Philips Healthcare (Suzhou) Co. Ltd.

Manufacturer's Technical Representative: Bret Wu

Mailing Address: 258, Zhong Yuan Road, Suzhou, China 215024

Telephone: 15040292470

Email: Bret.wu@philips.com

Product Information

Product Name: CT Systems

Product Type: NA

Product Model Number: CT 3500

General Description: Computed Tomography (CT) Medical Imaging System

Mounting Description: Rigid, Floor Mounted

Tested Seismic Enhancements: Seismic enhancements made to the test units and/or modifications required to address anomalies during the tests shall be incorporated into the production units.

Applicant Information

Applicant Company Name: TRU Compliance, by Structural Integrity Associates

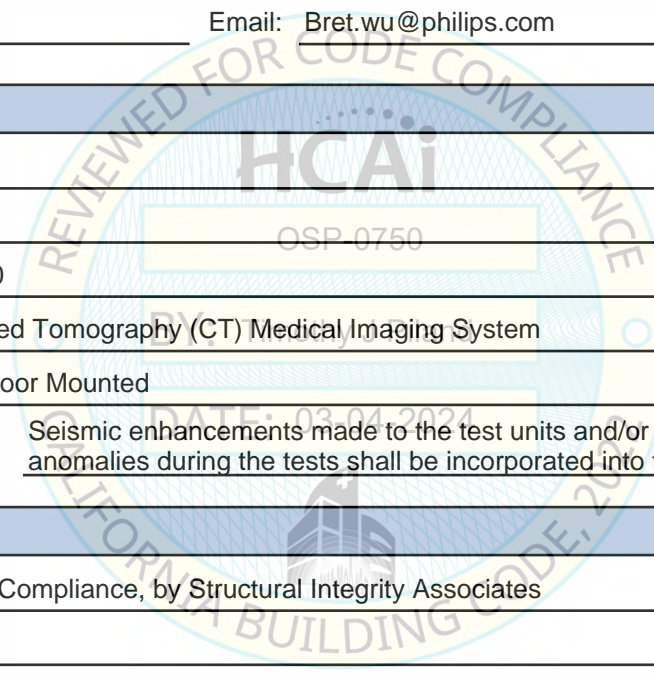
Contact Person: Daniel Zentner

Mailing Address: 233 SW Wilson Ave, Suite 101, Bend, OR 97702

Telephone: (541) 292-5839

Email: dzentner@structint.com

Title: Program Manager





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

Company Name: STRUCTURAL INTEGRITY ASSOCIATES, INC.

Name: LACHEZAR HANDZHIYSKI California License Number: S6515

Mailing Address: 5215 Hellyer Avenue, Suite 210, San Jose, CA 95138

Telephone: (669) 437-0200 Email: Lhandzhiyski@StructInt.com

Certification Method

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

Other (Please Specify): _____

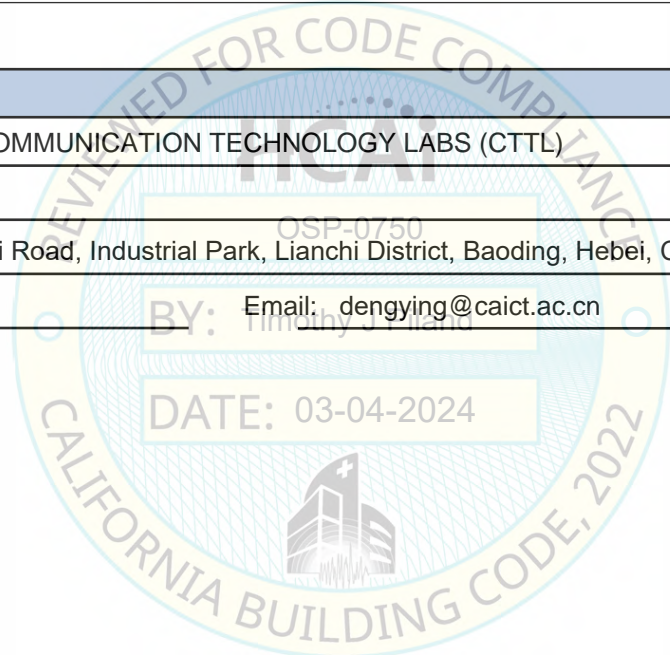
Testing Laboratory

Company Name: CHINA TELECOMMUNICATION TECHNOLOGY LABS (CTTL)

Contact Person: Ying Deng

Mailing Address: No. 299 Tengfei Road, Industrial Park, Lianchi District, Baoding, Hebei, China

Telephone: (+86) 0312-6798950 Email: dengying@caict.ac.cn





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Seismic Parameters

Design Basis of Equipment or Components (F_p/W_p) = CT Gantry & Couch: 2.40 (SDS=2.00, z/h=1); 1.13 (SDS = 2.5, z/h=0);
Consoles & Host Rack: 1.44 (SDS 2.00, z/h=1); 1.13 (SDS = 2.50, z/h=0)

SDS (Design spectral response acceleration at short period, g) = 2.0 (z/h = 1); 2.5 (z/h = 0)

a_p (Amplification factor) = 1.0

R_p (Response modification factor) = 1.5 (CT Gantry & Couch); 2.5 (Consoles & Host Rack)

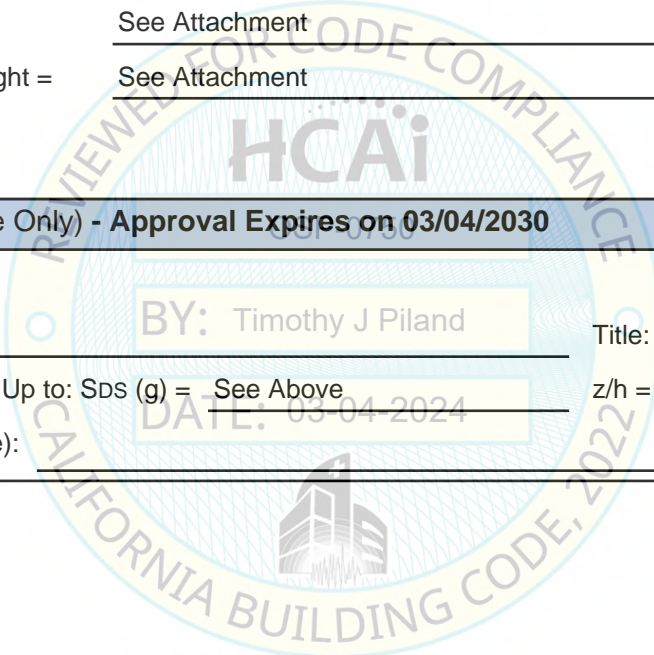
Ω_0 (System overstrength factor) = 2.0

I_p (Importance factor) = 1.5

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

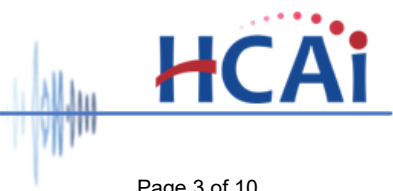
Natural frequencies (Hz) = See Attachment

Overall dimensions and weight = See Attachment



HCAI Approval (For Office Use Only) - Approval Expires on 03/04/2030

Date: 3/4/2024
 Name: Timothy Piland BY: Timothy J Piland Title: Senior Structural Engineer
 Special Seismic Certification Valid Up to: SDS (g) = See Above z/h = See Above
 Condition of Approval (if applicable):



UNIT UNDER TEST (UUT) SUMMARY SHEET

2200604-CR-001-R1



Manufacturer: Philips Healthcare (Suzhou) Co., Ltd.	UUT 5
Model Line: CT 3500	
Model Number: CT64PVA200	
Serial Number: N/A	
Test Report: No. B23X81964 (UUT1)	

UUT Properties						
Weight (lbs.) ¹	Dimension (in)			Lowest Natural Frequency (Hz)		
	Depth	Width	Height	Front-Back	Side-Side	Vertical
1,191	25.2	161.0	34.3	7.62	12.69	7.81

UUT Highest Passed Seismic Run Information									
Building Code	Test Criteria	S _{DS} (g)	z/h	I _P	A _{FLX-H} (g)	A _{RIG-H} (g)	A _{FLX-V} (g)	A _{RIG-V} (g)	
CBC 2022	ICC-ES AC156	2.0	1.0	1.5	3.20	2.40	1.68	0.68	
		2.5	0.0						

Product Construction Summary: Q235 Carbon Steel Frame. Plastic Cover.	Test Mounting Details: OSP-0750
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Options/Subcomponent Summary:	
Description	Part Number
N/A	N/A



160kg
Counterweigh

CT3500 Couch

Test Mounting Details:
<p>¹ Weight listed is the total weight. Individual details are as follows:</p> <p>Couch: 838.0 lbs. Counterweigh: 352.8 lbs.</p>

UUT5 was base mounted - rigid to the fixture using four (4) M16 Grade 8.8 screws. The fixture was connected to the table using eight (8) M16 Grade 8.8 screws. Unit maintained structural integrity and remained functional per manufacturer requirement after shake table test. Contents were included in testing per operating conditions.