



**OFFICE OF STATEWIDE HEALTH PLANNING AND DEVELOPMENT  
FACILITIES DEVELOPMENT DIVISION**

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

OFFICE USE ONLY

APPLICATION #: OSP – 0335

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

Type:  New  Renewal

**Manufacturer Information**

Manufacturer: GE Healthcare

Manufacturer's Technical Representative: Tom Farnow

Mailing Address: 3000 N. Grandview Blvd., Waukesha, WI 53188-1696

Telephone: 888-406-1101

Email: [Tom.Farnow@gehseismic.com](mailto:Tom.Farnow@gehseismic.com)

**Product Information**

Product Name: OPTIMA CT540 & DISCOVERY CT750 HD SYSTEM

Product Type: Computed Tomography (CT) medical imaging systems

Product Model Number: SEE ATTACHMENT 1

(List all unique product identification numbers and/or part numbers)

General Description: Multiple component CT medical imaging system. Seismic Certification is limited to the systems and components identified in Attachment 1. Seismic enhancements made to the test units and modifications required to address the anomalies observed during the tests shall be incorporated into the production units.

Mounting Description: Rigid Base mounted (i.e. floor mounted)

**Applicant Information**

Applicant Company Name: EASE LLC


Contact Person: Jonathan Roberson, S.E.

Mailing Address: 5877 Pine Ave, Suite 210, Chino Hills, CA. 91709

Telephone: (909) 606-7622

Email: [j.roberson@easeco.com](mailto:j.roberson@easeco.com)

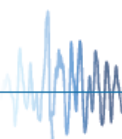
I hereby agree to reimburse the Office of Statewide Health Planning and Development review fees in accordance with the California Administrative Code, 2016.

Signature of Applicant: 

Date: December 4, 2019

Title: Principal Structural Engineer

Company Name: EASE Co.





**OFFICE OF STATEWIDE HEALTH PLANNING AND DEVELOPMENT  
FACILITIES DEVELOPMENT DIVISION**

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

Company Name:   EASE LLC  

Name:   Jonathan Roberson, S.E.   California License Number:   S4197  

Mailing Address:   5877 Pine Ave, Suite 210, Chino Hills, CA. 91709  

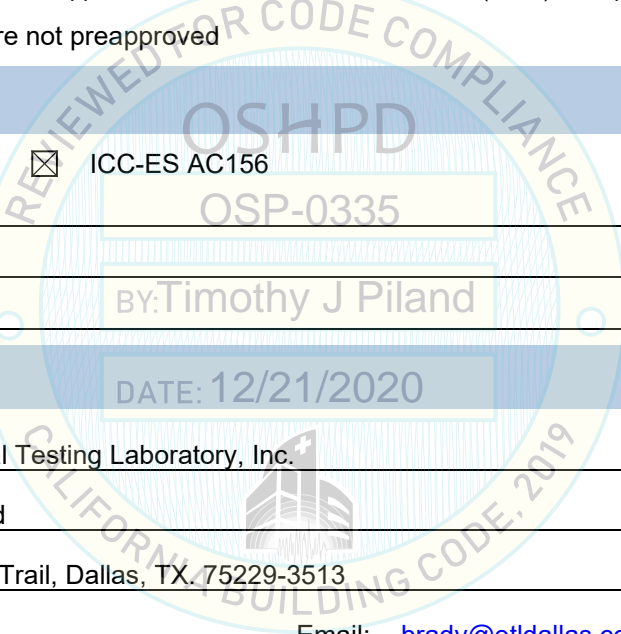
Telephone:   (909) 606-7622   Email:   [j.roberson@easeco.com](mailto:j.roberson@easeco.com)  

**Supports and Attachments Preapproval**

- Supports and attachments are preapproved under OPM- \_\_\_\_\_  
(Separate application for OSHPD Preapproval of Manufacturer's Certification (OPM) of Supports and attachments is required)
- Supports and attachments are not preapproved

**Certification Method**

- Testing in accordance with:  ICC-ES AC156
- Other (Please Specify): \_\_\_\_\_



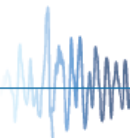
**Testing Laboratory**

Company Name:   Environmental Testing Laboratory, Inc.  

Contact Name:   Brady Richard  

Mailing Address:   11034 Indian Trail, Dallas, TX. 75229-3513  

Telephone:   (972) 247-9657   Email:   [brady@etldallas.com](mailto:brady@etldallas.com)  





OFFICE OF STATEWIDE HEALTH PLANNING AND DEVELOPMENT
FACILITIES DEVELOPMENT DIVISION

Seismic Parameters

Design in accordance with ASCE 7-10 Chapter 13: [X] Yes [ ] No

Design Basis of Equipment or Components (Fp/Wp) = See Attachment 1 / Table 2 & Table 4

S\_Ds (Design spectral response acceleration at short period, g) = See Attachment 1 / Table 2 & Table 4

ap (In-structure equipment or component amplification factor) = See Attachment 1 / Table 2 & Table 4

Rp (Equipment or component response modification factor) = See Attachment 1 / Table 2 & Table 4

Omega\_0 (System overstrength factor) = See Attachment 1 / Table 2 & Table 4

Ip (Importance factor) = 1.5

z/h (Height factor ratio) = See Attachment 1 / Table 2 & Table 4

Equipment or Component Natural Frequencies (Hz) = See Attachment 2

Overall dimensions and weight (or range thereof) = See Attachment 1 / Table 1 & Table 3

Equipment or Components @ grade designed in accordance with ASCE 7-10 Chapter 15: [ ] Yes [X] No

Design Basis of Equipment or Components (V/W) =

S\_Ds (Design spectral response acceleration at short period, g) =

S\_D1 (Design spectral response acceleration at 1 second period, g) =

R (Response modification coefficient) =

Omega\_0 (System overstrength factor) =

Cd (Deflection amplification factor) =

Ip (Importance factor) = 1.5

Height to Center of Gravity above base =

Equipment or Component Natural Frequencies (Hz) =

Overall dimensions and weight (or range thereof) =

Tank(s) designed in accordance with ASME BPVC, 2015: [ ] Yes [X] No

List of Attachments Supporting Special Seismic Certification

[X] Test Report(s) [ ] Drawings [ ] Calculations [X] Manufacturer's Catalog

[X] Other(s) (Please Specify): Attachments 1 & 2

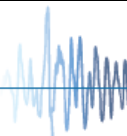
OSHPD Approval (For Office Use Only) - Approval Expires on December 31, 2025

Signature: [Handwritten Signature]
Print Name: Timothy J. Piland

Date: December 21, 2020
Title: SSE

Special Seismic Certification Valid Up to: S\_Ds (g) = See Above z/h = See Above

Condition of Approval (if applicable):



**ATTACHMENT 1: SEISMIC CERTIFIED SYSTEMS & COMPONENTS**

**TABLE 1: SEISMIC CERTIFIED SYSTEMS & COMPONENTS: OPTIMA CT540 SYSTEM**

SYSTEM MFR.	GE HEALTHCARE							
SYSTEM	OPTIMA CT540 SYSTEM							
SYSTEM COMPONENT	MODEL NO.	DIMENSIONS (IN.)			MAX WT (LB.)	MOUNT <sup>[8]</sup>	BASIS <sup>[1]</sup>	
		W	D	H				
<b>GANTRIES</b>								
Optima CT540 Gantry <sup>[6]</sup>	5432539	80.7	41.1	76.5	3943	Floor	UUT-A1	
Optima CT540 Gantry (TangE) <sup>[10]</sup>	5432539-3	80.7	41.1	76.3	3960	Floor	UUT1806-4	
Optima CT540 Gantry (TangE) <sup>[10]</sup>	5432539-5	80.7	41.1	76.3	3960	Floor	SAME	
Optima CT540 Gantry (TangE) <sup>[10]</sup>	5432539-7	80.7	41.1	76.3	3960	Floor	SAME	
<b>PATIENT TABLES</b> <sup>[7]</sup>								
GT1700V Table	5122080-11	25.6	93.3	19.2 / 41.3	1,059 <sup>[3]</sup>	Floor	UUT-A4	
GT1700V Table	5122080-12	25.6	93.3	19.2 / 41.3	1,059	Floor	SAME	
<b>POWER DISTRIBUTION UNITS</b>								
Power Distribution Unit	2326492-71	27.6	21.7	41.8	813 <sup>[2]</sup>	Floor	UUT-A2	
<b>CONSOLES</b>								
NIO Console <sup>[9]</sup>	5411378-23	18.5	29.1	25.8	161	Floor	UUT-A3	
NIO Console <sup>[9]</sup>	5411378-11	18.5	29.1	25.8	159	Floor	INT	
RIO Console <sup>[5][9]</sup>	5577708-102	18.5	29.1	25.8	176	Floor	UUT-A5	
Open Console 16 (TangE)	5941604-10	15.7	26.4	22.7	133	Floor	UUT1806-5	
Open Console 16 (TangE)	5941604-22	15.7	26.4	22.7	133	Floor	SAME	
Open Console 16 (TangE)	5941604-30	15.7	26.4	22.7	133	Floor	SAME	
Open Console w/ Z8G4 <sup>[5]</sup>	5946404-15	15.8	26.4	22.7	142 <sup>[2]</sup>	Floor	UUT1914-2	
Open Console w/ Z8G4	5941604-16	15.8	26.4	22.7	142 <sup>[2]</sup>	Floor	SAME	
Open Console w/ Z8G4	5941604-26	15.8	26.4	22.7	142 <sup>[2]</sup>	Floor	SAME	
<b>OTHER EQUIPMENT</b>								
Freedom workspace – Large w/ 2 LCD monitors	5168666-2	53.1	29.2	26.9 / 35.9	167 <sup>[4]</sup>	Floor	UUT-A6	
Freedom workspace w/ 2 LCD monitors	5168666-3	50	24.4	26.9 / 35.9	155 <sup>[4]</sup>	Floor	UUT-A7	
MOUNT	FLOOR (RIGID BASE) MOUNT: free-standing, base-mounted condition with the component rigidly attached to a supporting structure and no lateral support above the base.							
NOTES	<ol style="list-style-type: none"> <li>BASIS: <ul style="list-style-type: none"> <li>UUT#: Indicates that a test specimen matching these characteristics was tested as part of this testing program.</li> <li>SAME: Model is physically, mechanically &amp; electrically the same as test specimen. Difference is limited to model number, color and/or software.</li> <li>INT (Interpolate or extrapolate): indicates a model that was not specifically tested, and by which seismic qualification was established through evaluation of testing of other, similar models in the product line.</li> </ul> </li> <li>Weight includes GE Healthcare seismic mounting brackets.</li> <li>Weight for GT1700V Table does not include 350 lb. patient load present during testing.</li> <li>Weight includes 2 LCD monitors.</li> <li>Component is not part of system; it is included only to establish basis for seismic qualification.</li> <li>This gantry requires GE mounting kit: Catalog No. B77602CB / Engineering P/N 5494520</li> <li>Requires GE mounting kit from Catalog No. B7660MY or equivalent.</li> <li>See Attachment 2 for additional mounting information.</li> <li>NIO/RIO Console requires GE mounting kit: Catalog No. B73762CA / Engineering P/N 5394347</li> <li>This gantry requires GE mounting kit: Catalog No. B75082DA / Engineering P/N 5494520</li> </ol>							

**ATTACHMENT 1: SEISMIC CERTIFIED SYSTEMS & COMPONENTS**

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**TABLE 2: ASCE 7-10 DESIGN BASIS FOR EQUIPMENT: OPTIMA CT540 SYSTEM**

COMPONENT	MODEL NO.	$F_p / W_p$	$S_{DS}$	$z/h$	$a_p$	$R_p$	$\Omega_0$
Optima CT540 Gantry	5432539	2.40	2.0	1	1	1 ½	1 ½
		1.13	2.5	0			
Optima CT540 Gantry (TangE)	5432539-3 5432539-5 5432539-7	2.40	2.0	1	1	1 ½	1 ½
		1.13	2.5	0			
		2.40	2.0	1			
GT1700V Patient Table	5122080-11 5122080-12	2.40	2.0	1	1	1 ½	1 ½
		1.13	2.5	0			
Consoles	5411378-23 5411378-11 5577708-102	1.50	2.0	1	2 ½	6	2 ½
		1.13	2.5	0			
Open Console 16 (TangE)	5941604-10 5941604-22 5941604-30	1.44	2.0	1	1	2 ½	1 ½
		1.13	2.5	0			
		1.44	2.0	1			
Open Console w/ Z8G4	5946404-15 5941604-16 5941604-26	1.44	2.0	1	1	2 ½	1 ½
		1.13	2.5	0			
		1.44	2.0	1			
Freedom Workspace	5168666-2 5168666-3	1.44	2.0	1	1	2 ½	2 ½
		1.13	2.5	0			
PDU	2326492-71	1.44	2.0	1	1	2 ½	2 ½
		1.13	2.5	0			

DATE: 12/21/2020



**ATTACHMENT 1: SEISMIC CERTIFIED SYSTEMS & COMPONENTS**


**TABLE 3: SEISMIC CERTIFIED SYSTEMS & COMPONENTS: DISCOVER CT750 HD SYSTEM**


MANUFACTURER	GE HEALTHCARE						
SYSTEM	DISCOVERY CT750 HD						
SYSTEM COMPONENT	MODEL NO.	DIMENSIONS (IN.)			MAX WT (LB.)	MOUNT	BASIS <sup>[1]</sup>
		W	D	H			
<b>GANTRIES</b>							
Discovery CT750 HD Gantry	5232084-7	89.25	39.65	74.6	3992	Floor	UUT-B2
Discovery CT750 HD Gantry	5232083-7 5232083-5	89.25	39.65	74.6	3992	Floor	SAME
<b>PATIENT TABLES</b>							
GT 1700V	5122080-11	25.6	93.3	19.2 / 41.2	1059 <sup>[2]</sup>	Floor	UUT-A4
GT 1700	5122080-4	25.6	93.3	19.2 / 41.2	1059	Floor	INT
GT 2000X	5380966	25.6	114.5	18.3 / 41.3	1258	Floor	INT
GT 2000	5121647-3	25.6	114.5	18.3 / 41.3	1146 <sup>[3]</sup>	Floor	UUT-B3
GT 2000	5121647-4	25.6	114.5	18.3 / 41.3	1146	Floor	SAME
<b>POWER DISTRIBUTION UNITS</b>							
Power Distribution Unit	2326492-61	27.6	21.7	41.8	818 <sup>[4]</sup>	Floor	UUT-B4
<b>CONSOLES</b>							
GOC 6.6 Console	5212920-150	48.74	46.5 / 54.7	26.7 / 34.7	405 <sup>[5]</sup>	Floor	UUT-B1
MOUNTING	FLOOR (RIGID BASE) MOUNT: free-standing, base-mounted condition with the component rigidly attached to a supporting structure and no lateral support above the base.						
NOTES	<ol style="list-style-type: none"> <li>BASIS: <ul style="list-style-type: none"> <li>UUT#: Indicates that a test specimen matching these characteristics was tested as part of this testing program.</li> <li>SAME: Model is physically, mechanically &amp; electrically the same as test specimen. Difference is limited to model number, color and/or software.</li> <li>INT (Interpolate or extrapolate): indicates a model that was not specifically tested, and by which seismic qualification was established through evaluation of testing of other, similar models in the product line.</li> </ul> </li> <li>Weight of 1700V Patient Table does not include 350 lb. patient load present during testing.</li> <li>Weight of GT 2000 Patient Table does not include 550 lb. patient load present during testing.</li> <li>Weight of PDU includes 22 lb. GE Healthcare seismic mounting brackets.</li> <li>Weight of GOC 6.6 Console includes GE Healthcare seismic mounting brackets.</li> </ol>						

**TABLE 4: ASCE 7-10 DESIGN BASIS FOR EQUIPMENT: DISCOVER CT750 HD SYSTEM**

COMPONENT	MODEL NO.	F <sub>p</sub> / W <sub>p</sub>	S <sub>Ds</sub>	z/h	a <sub>p</sub>	R <sub>p</sub>	Ω <sub>0</sub>
Discovery CT750 HD Gantry	5232084-7	2.40	2.0	1	1	1 ½	1 ½
	5232083-7	1.13	2.5	0			
	5232083-5						
GT 1700V Patient Table	5122080-11	2.40	2.0	1	1	1 ½	1 ½
		1.13	2.5	0			
GT 2000 / GT 2000X / GT 1700 Patient Tables	5122080-4 5380966 5121647-3 5121647-4	2.40	2.0	1	1	1 ½	1 ½
		1.13	2.5	0			
Console	5212920-150	1.50	2.0	1	2 ½	6	2 ½
		1.13	2.5	0			
PDU	2326492-61	1.44	2.0	1	1	2 ½	2 ½
		1.13	2.5	0			

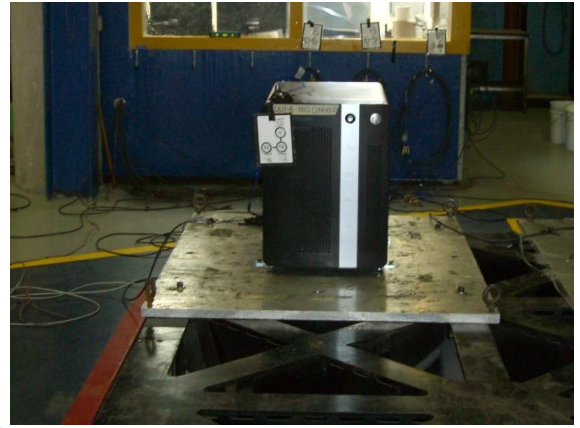
**ATTACHMENT 2: TEST SPECIMEN SUMMARY**

<b>UUT- A1 Optima CT540 Gantry</b>									
<b>MANUFACTURER:</b> GE Hangwei Medical Systems Co., LTD									
<b>IDENTIFICATION:</b> Model No.: 5432539									
Serial No.: ENG Prototype									
<b>DESCRIPTION:</b> System component of the Optima CT540 System									
<b>MOUNTING:</b> Rigid Base (Floor) Mounted using: GE mounting kit: Catalog No. B77602CB (P/N 5494520) (4) - 5/8" Dia Hex head bolts to interface frame.									
<b>PROPERTIES:</b>									
<b>DIMENSIONS (in.)</b>					<b>LOWEST RESONANT FREQUENCY (Hz.)</b>				
Width	Depth	Height	Weight (lb.)		X-Axis	Y-Axis	Z-Axis		
80.7	41.1	76.5	3,943		6.4	9.3	21.0		
<b>SHAKE TABLE TEST PARAMETERS</b>									
CODE	TEST CRITERIA	S <sub>DS</sub>	z/h	I <sub>p</sub>	A <sub>FLX-H</sub>	A <sub>RIG-H</sub>	A <sub>FLX-V</sub>	A <sub>RIG-V</sub>	
CBC 2013	ICC-ES AC156-10	2.0 2.6	1.0 0.0	1.5	3.20 2.60	2.40 1.04	1.54 1.74	0.54 0.70	
Unit satisfied AC156 requirements for structural integrity and manufacturer requirements for functionality after AC156 test.									

<b>UUT-A2 Power Distribution Unit (NGPDU-71)</b>									
<b>MANUFACTURER:</b> GE Hangwei Medical Systems Co., LTD									
<b>IDENTIFICATION:</b> Model No.: 2326492-71									
Serial No.: 306846HM7									
<b>DESCRIPTION:</b> System component of the Optima CT540 System									
<b>MOUNTING:</b> Rigid Base (Floor) mounted using: (2) – 3/8" dia. ASTM A574 Socket Head Cap Screws w/ washer through each GE mounting bracket to floor plate. (4 anchors total) (2) – Seismic Bracket, System Cabinet (P/N 2354563-2) Each bracket mounted to cabinet w/: (2) – M10 x 25mm Class 12.9 bolt (Torque= 38.4 N-m) (2) – M10 Lock Washer (P/N 2203-M10-07) (2) – M10 Flat Washer (P/N 2000-M10-03) NOTE: GE bracket assembly included standard .									
<b>PROPERTIES:</b>									
<b>DIMENSIONS (in.)</b>					<b>LOWEST RESONANT FREQUENCY (Hz.)</b>				
Width	Depth	Height	Weight (lb.)		X-Axis	Y-Axis	Z-Axis		
27.6	21.7	41.8	813		17.2	15.6	32.6		
<b>SHAKE TABLE TEST PARAMETERS</b>									
CODE	TEST CRITERIA	S <sub>DS</sub>	z/h	I <sub>p</sub>	A <sub>FLX-H</sub>	A <sub>RIG-H</sub>	A <sub>FLX-V</sub>	A <sub>RIG-V</sub>	
CBC 2013	ICC-ES AC156-10	2.0 2.6	1.0 0.0	1.5	3.20 2.60	2.40 1.04	1.54 1.74	0.54 0.70	
Unit satisfied AC156 requirements for structural integrity and manufacturer requirements for functionality after AC156 test.									

**ATTACHMENT 2: TEST SPECIMEN SUMMARY**

<b>UUT- A3 NIO Console</b>									
<b>MANUFACTURER:</b>		GE Hangwei Medical Systems Co., LTD							
<b>IDENTIFICATION:</b>		Model No.: 5411378-11 (on label) Model No.: 5411378-23 (as configured w/ GPU card)							
<b>DESCRIPTION:</b>		System component of the Optima CT580 System Manufactured unit was Model No. 5411378-11. Prior to testing a GPU card added to the test specimen, transforming it to Model No. 5411378-23.							
<b>MOUNTING:</b>		Rigid Base (Floor) Mounted using: GE mounting kit: Catalog No. B73762CA (Eng P/N 5394347) (4) - 3/8" dia. grade 8 Allen head cap screw to aluminum interface plate.							
<b>PROPERTIES:</b>									
DIMENSIONS (in.)					LOWEST RESONANT FREQUENCY (Hz.)				
Width	Depth	Height	Weight (lb.)		Side-Axis	Front-Axis	Vertical-Axis		
18.5	29.1	25.8	161		12.2	16.8	9.9		
<b>SHAKE TABLE TEST PARAMETERS</b>									
CODE	TEST CRITERIA	S <sub>DS</sub>	z/h	I <sub>P</sub>	A <sub>FLX-H</sub>	A <sub>RIG-H</sub>	A <sub>FLX-V</sub>	A <sub>RIG-V</sub>	
CBC 2013	ICC-ES AC156-10	2.0 2.6	1.0 0.0	1.5	3.20 2.60	2.40 1.04	1.54 1.74	0.54 0.70	
Unit satisfied AC156 requirements for structural integrity and manufacturer requirements for functionality after AC156 test.									



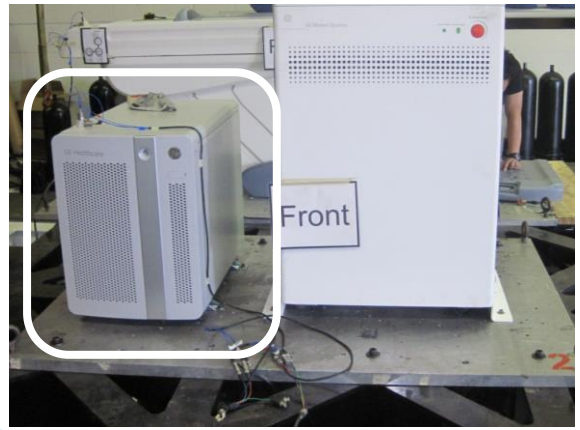
<b>UUT- A4 GT1700V Table</b>									
<b>MANUFACTURER:</b>		GE Hangwei Medical Systems Co., LTD							
<b>IDENTIFICATION:</b>		Model No.: 5122080-11							
<b>DESCRIPTION:</b>		System component of the <b>Optima CT660 System</b> . Also used with other GE imaging systems.  Test specimen included a simulated patient load of 350 lb.							
<b>MOUNTING:</b>		Rigid Base (Floor) Mounted using: (4) - 5/8" dia. Gr 8 hex head bolts (torqued to 60 lb-ft) w/ GEHC supplied patient table foot assembly. Leveling foot bushing excluded.  Requires Seismic Kit B7660MY (Optima CT660 system) or equivalent.							
<b>PROPERTIES:</b>									
DIMENSIONS (in.)					LOWEST RESONANT FREQUENCY (Hz.)				
Width	Depth	Height	Weight (lb.)		Transverse-Axis	Longitudinal-Axis	Vertical-Axis		
25.6	93.3	19.2 / 41.2	1059+ 350 Patient		3.9	15.2	14.2		
<b>SHAKE TABLE TEST PARAMETERS</b>									
CODE	TEST CRITERIA	S <sub>DS</sub>	z/h	I <sub>P</sub>	A <sub>FLX-H</sub>	A <sub>RIG-H</sub>	A <sub>FLX-V</sub>	A <sub>RIG-V</sub>	
CBC 2013	ICC-ES AC156-12	2.0 2.6	1.0 0.0	1.5	3.20 2.60	2.40 1.04	1.54 1.74	0.54 0.70	
Unit satisfied AC156 requirements for structural integrity and manufacturer requirements for functionality after AC156 test.									





**ATTACHMENT 2: TEST SPECIMEN SUMMARY**

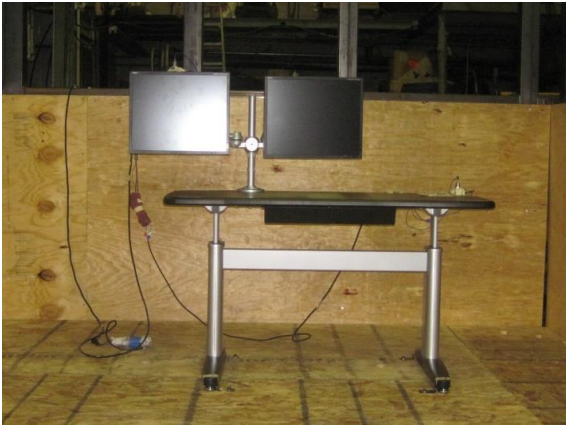
<b>UUT- A5 RIO Console</b>									
<b>MANUFACTURER:</b>		GE Medical Systems, LLC							
<b>IDENTIFICATION:</b>		Model No.: 5577708-102							
<b>DESCRIPTION:</b>		System component of the <b>Optima CT660 System</b> Also used with other GE imaging systems.							
<b>MOUNTING:</b>		Rigid Base (Floor) Mounted using: GE mounting kit: Catalog No. B73762CA (Eng P/N 5394347) (4) - 3/8" dia. grade 8 Allen head cap screw to aluminum interface plate.							
<b>PROPERTIES:</b>									
DIMENSIONS (in.)					LOWEST RESONANT FREQUENCY (Hz.)				
Width	Depth	Height	Weight (lb.)		Front-Axis	Side-Axis	Vertical-Axis		
18.5	29	25.8	175.5		21.8	13.5	13.6		
<b>SHAKE TABLE TEST PARAMETERS</b>									
CODE	TEST CRITERIA	S <sub>Ds</sub>	z/h	I <sub>p</sub>	A <sub>FLX-H</sub>	A <sub>RIG-H</sub>	A <sub>FLX-V</sub>	A <sub>RIG-V</sub>	
CBC 2013	ICC-ES AC156-12	2.0 2.6	1.0 0.0	1.5	3.20 2.60	2.40 1.04	1.54 1.74	0.54 0.70	
Unit satisfied AC156 requirements for structural integrity and manufacturer requirements for functionality after AC156 test.									




<b>UUT- A6 Freedom Workspace – Large w/ 2 LCD monitors</b>									
<b>MANUFACTURER:</b>		GE Healthcare							
<b>IDENTIFICATION:</b>		Model No. 5168666-2							
<b>DESCRIPTION:</b>		System component of the Discovery 610 PET/CT System. Also used with other GE imaging systems. Larger variant of the Freedom Workspace table w/ (2)-EIZO LCD Monitors mounted to articulated arms.							
<b>MOUNTING:</b>		Rigid Base (Floor) mounted using: GE mounting kit: Catalog No. B73762CA (Eng P/N 5394347) (4) - 3/8" dia. grade 8 Allen head cap screw to aluminum interface plate.							
<b>PROPERTIES:</b>									
DIMENSIONS (in.)					LOWEST RESONANT FREQUENCY (Hz.)				
Width	Depth	Height	Weight (lb.)		Side -Axis	Front-Axis	Vertical-Axis		
53.1	29.2	35	167		6.1	3.9	3.9		
<b>SHAKE TABLE TEST PARAMETERS</b>									
CODE	TEST CRITERIA	S <sub>Ds</sub>	z/h	I <sub>p</sub>	A <sub>FLX-H</sub>	A <sub>RIG-H</sub>	A <sub>FLX-V</sub>	A <sub>RIG-V</sub>	
CBC 2013	ICC-ES AC156-12	2.0 2.6	1.0 0.0	1.5	3.20 2.60	2.40 1.04	1.54 1.74	0.54 0.70	
Unit satisfied AC156 requirements for structural integrity and manufacturer requirements for functionality after AC156 test.									





**ATTACHMENT 2: TEST SPECIMEN SUMMARY**

UUT- A7 Freedom Workspace w/ 2 LCD monitors									
MANUFACTURER:		GE Hangwei Medical Systems Co., LTD.							
IDENTIFICATION:		Model No. 5168666-3							
DESCRIPTION:		System component of the Optima CT660 System Also used with other GE imaging systems.							
MOUNTING:		Rigid Base (Floor) mounted using: GE Healthcare brackets w/ (4) – 3/8" dia. socket head bolts, nuts & washers to 3/4" OSB decking.							
									
PROPERTIES:									
DIMENSIONS (in.)				LOWEST RESONANT FREQUENCY (Hz.)					
Width	Depth	Height	Weight (lb.)	Side -Axis	Front-Axis	Vertical-Axis			
50	24.4	26.9 / 35.9	155 w/ monitors	6.7	11.9	31.3			
SHAKE TABLE TEST PARAMETERS									
CODE	TEST CRITERIA	S <sub>DS</sub>	z/h	I <sub>P</sub>	A <sub>FLX-H</sub>	A <sub>RIG-H</sub>	A <sub>FLX-V</sub>	A <sub>RIG-V</sub>	
CBC 2013	ICC-ES AC156-12	2.0 2.6	1.0 0.0	1.5	3.20 2.60	2.40 1.04	1.54 1.74	0.54 0.70	
Unit satisfied AC156 requirements for structural integrity and manufacturer requirements for functionality after AC156 test.									

UUT-B1 GOC 6.6 Console									
MANUFACTURER:		General Electric Company							
IDENTIFICATION:		Model No.: 5212920-150 Serial No.: 431863CN0							
DESCRIPTION:		System component of the Discovery CT750 HD System							
MOUNTING:		Rigid Base (Floor) mounted using: (2) – 3/8" dia. ASTM A574 Socket Head Cap Screws w/ washer through each GE mounting bracket to floor plate. (4 anchors total)  GE mounting assembly including: (2) Bracket P/N 2330594 Each bracket mounted to cabinet w/: (2) M10 x 20mm Class 12.9 Torque 38.4 Nm (2) M10 Lock Washer (P/N 2203-M10-07) (2) M10 Flat Washer (P/N 2000-M10-03)							
									
PROPERTIES:									
DIMENSIONS (in.)				LOWEST RESONANT FREQUENCY (Hz.)					
Width	Depth	Height	Weight (lb.)	X-Axis	Y-Axis	Z-Axis			
48.74	46.54 / 54.74	26.7 / 34.7	405	6.2	17.3	22.9			
SHAKE TABLE TEST PARAMETERS									
CODE	TEST CRITERIA	S <sub>DS</sub>	z/h	I <sub>P</sub>	A <sub>FLX-H</sub>	A <sub>RIG-H</sub>	A <sub>FLX-V</sub>	A <sub>RIG-V</sub>	
CBC 2013	ICC-ES AC156-10	2.0 2.6	1.0 0.0	1.5	3.20 2.60	2.40 1.04	1.54 1.74	0.54 0.70	
Unit satisfied AC156 requirements for structural integrity and manufacturer requirements for functionality after AC156 test.									

**ATTACHMENT 2: TEST SPECIMEN SUMMARY**

<b>UUT-B2 Discovery CT750 HD Gantry</b>									
<b>MANUFACTURER:</b> General Electric Company									
<b>IDENTIFICATION:</b> Model No.: 5232084-7									
Serial No.: 433971CN9									
<b>DESCRIPTION:</b> System component of the Discovery CT750 HD System.									
<b>MOUNTING:</b> Rigid Base (Floor) mounted using (4) – 5/8" Dia Grade 8 Hex head Cap bolts to interface frame.									
<b>PROPERTIES:</b>									
DIMENSIONS (in.)					LOWEST RESONANT FREQUENCY (Hz.)				
Width	Depth	Height	Weight (lb.)		X-Axis	Y-Axis	Z-Axis		
89.25	39.65	74.6	3992		6.1	9.6	14.0		
<b>SHAKE TABLE TEST PARAMETERS</b>									
CODE	TEST CRITERIA	S <sub>Ds</sub>	z/h	I <sub>p</sub>	A <sub>FLX-H</sub>	A <sub>RIG-H</sub>	A <sub>FLX-V</sub>	A <sub>RIG-V</sub>	
CBC 2013	ICC-ES AC156-10	2.0 2.5	1.0 0.0	1.5	3.20 2.50	2.40 1.00	1.34 1.68	0.54 0.68	
Unit satisfied AC156 requirements for structural integrity and manufacturer requirements for functionality after AC156 test.									

<b>UUT- B3 GT2000 Patient Table</b>									
<b>MANUFACTURER:</b> GE Hangwei Medical Systems CO. LTD.									
<b>IDENTIFICATION:</b> Model No.: 5121647-3									
<b>DESCRIPTION:</b> System Component of the LightSpeed VCT System GT2000 N9 Patient Table Test specimen included a simulated patient load of 550 lb. Seismic Kit									
<b>MOUNTING:</b> Floor: (4) – 5/8" dia GR 8 hex head bolts (torqued to 60 lb-ft) w/ GEHC supplied patient table foot assembly.									
<b>PROPERTIES:</b>									
DIMENSIONS (in.)					LOWEST RESONANT FREQUENCY (Hz.)				
Width	Depth	Height	Weight (lb.)		Transverse-Axis	Longitudinal-Axis	Vertical-Axis		
25.6	114.5	18.3 / 41.3	1146+550 Patient		2.7	7.1	5.7		
<b>SHAKE TABLE TEST PARAMETERS</b>									
CODE	TEST CRITERIA	S <sub>Ds</sub>	z/h	I <sub>p</sub>	A <sub>FLX-H</sub>	A <sub>RIG-H</sub>	A <sub>FLX-V</sub>	A <sub>RIG-V</sub>	
CBC 2013	ICC-ES AC156-12	2.0 2.5	1.0 0.0	1.5	3.20 2.50	2.40 1.00	1.34 1.68	0.54 0.68	
Unit satisfied AC156 requirements for structural integrity and manufacturer requirements for functionality after AC156 test.									

**ATTACHMENT 2: TEST SPECIMEN SUMMARY**


<b>UUT- B4 Power Distribution Unit</b>									
<b>MANUFACTURER:</b>		GE Hangwei Medical Systems CO. LTD.							
<b>IDENTIFICATION:</b>		Model No.: 2326492-61							
<b>DESCRIPTION:</b>		System component of the Optima CT580 System. Also used with other GE imaging systems.  Also referred to as NGPDU-61							
<b>MOUNTING:</b>		<u>Rigid Base (Floor) mounted using:</u> (2) – 3/8" dia. ASTM A574 Socket Head Cap Screws w/ washer through each GE mounting bracket to floor plate. (4 anchors total) <u>GE mounting assembly including:</u> (2) – Seismic Bracket, System Cabinet (P/N 2354563-2) Each bracket mounted to cabinet w/ (2) – M10 x 25mm Class 12.9 bolt (Torque= 38.4 N-m) (2) – M10 Lock Washer (P/N 2203-M10-07) (2) – M10 Flat Washer (P/N 2000-M10-03) NOTE: GE bracket assembly included standard.							
<b>PROPERTIES:</b>									
DIMENSIONS (in.)					LOWEST RESONANT FREQUENCY (Hz.)				
Width	Depth	Height	Weight (lb.)		Side-Axis	Front-Axis	Vertical-Axis		
27.6	21.7	41.8	818		15.7	19.9	45		
<b>SHAKE TABLE TEST PARAMETERS</b>									
CODE	TEST CRITERIA	S <sub>DS</sub>	z/h	I <sub>P</sub>	A <sub>FLX-H</sub>	A <sub>RIG-H</sub>	A <sub>FLX-V</sub>	A <sub>RIG-V</sub>	
CBC 2013	ICC-ES AC156-12	2.0	1.0	1.5	3.20	2.40	1.54	0.54	
		2.6	0.0		2.60	1.04	1.74	0.70	
Unit satisfied AC156 requirements for structural integrity and manufacturer requirements for functionality after AC156 test.									




<b>1806-4 Optima CT540 Gantry</b>									
<b>MANUFACTURER:</b>		GE Healthcare							
<b>IDENTIFICATION:</b>		Model No.: 5432539-3							
<b>DESCRIPTION:</b>		Component of the Optima CT 540 system. Engineering prototype representative of standard production.							
<b>MOUNTING:</b>		<u>Rigid Base (Floor) Mounted w/</u> (4) – 5/8" diameter SAE J429 grade 8 bolts with washers through GE seismic base assembly.  Requires GE mounting kit: Catalog No. B75082DA / Engineering P/N 5494520							
DIMENSIONS (in.)					LOWEST RESONANT FREQUENCY (Hz.)				
Width	Depth	Height	Weight (lb.)		Side-Axis	Front-Axis	Vert-Axis		
80.7	41.1	76.3	3,960 Reported 3,908 Measured		7.2	6.5	25.4		
<b>ICC-ES AC156 SHAKE TABLE TEST PARAMETERS</b>									
S <sub>DS</sub> (G)	z/h	I <sub>P</sub>	A <sub>FLX-H</sub> (G)	A <sub>RIG-H</sub> (G)	A <sub>FLX-V</sub> (G)	A <sub>RIG-V</sub> (G)			
2.0	1	1.5	3.2	2.4	1.68	0.68			
2.5	0								
Unit satisfied AC156 requirements for structural integrity and manufacturer requirements for functionality after AC156 test.									



**ATTACHMENT 2: TEST SPECIMEN SUMMARY**

<b>1806-5 Optima CT540 Open Console</b>						
<b>MANUFACTURER:</b> GE Healthcare						
<b>IDENTIFICATION:</b> Model No.: 5941604-10						
<b>DESCRIPTION:</b> Component of the Optima CT 540 system. "Open" console style						
<b>MOUNTING:</b> <u>Rigid Base (Floor) mounted using:</u> GE Console Anchor Kit 5812703-2 including: - (3) – Bracket (P/N 5357148-3), each w/ - (2) – M6 x 16 10.9 Class bolts (Torque = 7.9 N-m) - (2) – Flat washers (3) – 3/8" dia. ASTM A574 Socket Head Cap Screw w/ washer to test fixture.  NOTE: Console Anchor Kit 5812703-2 is included standard w/ console.						
						
<b>DIMENSIONS (in.)</b>						
Width	Depth	Height	Weight (lb.)	<b>LOWEST RESONANT FREQUENCY (Hz.)</b>		
15.7	26.4	22.7	132.5	Side-Axis	Front-Axis	Vert-Axis
				14.4	32.2	>50
<b>ICC-ES AC156 SHAKE TABLE TEST PARAMETERS</b>						<b>CODE: 2016 CBC</b>
S <sub>DS</sub> (G)	z/h	I <sub>p</sub>	A <sub>FLX-H</sub> (G)	A <sub>RIG-H</sub> (G)	A <sub>FLX-V</sub> (G)	A <sub>RIG-V</sub> (G)
2.0 2.5	1 0	1.5	3.2	2.4	1.68	0.68
Unit satisfied AC156 requirements for structural integrity and manufacturer requirements for functionality after AC156 test.						

<b>UUT 1914-2 Open Console w/ Z8G4</b>						
<b>Manufacturer:</b> GE Hangwei Medical Systems Co., LTD.						
<b>Identification:</b> Model No.: 5946404-15 Serial No.: 000000HM1						
<b>Description:</b> Component of the Revolution Maxima / Revolution Ace CT Systems - HP Z8G4 Computer - Open style console - Configuration controlled verification unit that is equivalent to standard production.						
<b>Mounting:</b> <u>Rigid Base (Floor) mounted using:</u> GE Console Anchor Kit 5812703-2 (3) – 3/8" dia. SAE J429 Grade 8 bolts w/ washer to test fixture.  NOTE: Console Anchor Kit 5812703-2 is included standard w/ console.						
						
<b>Dimensions (in.)</b>						
Width	Depth	Height	Weight (lb.)	<b>Lowest Resonant Frequency (Hz.)</b>		
15.8	26.4	22.7	141.5 w/ brackets	Side-Axis	Front-Axis	Vert-Axis
				14.6	30.1	26.2
<b>ICC-ES AC156 Shake Table Test Parameters</b>						<b>Code: 2016 CBC</b>
S <sub>DS</sub> (G)	z/h	I <sub>p</sub>	A <sub>FLX-H</sub> (G)	A <sub>RIG-H</sub> (G)	A <sub>FLX-V</sub> (G)	A <sub>RIG-V</sub> (G)
2.0 2.5	1 0	1.5	3.2	2.4	1.68	0.68
Unit satisfied AC156 requirements for structural integrity and manufacturer requirements for functionality after AC156 test.						