



OFFICE OF STATEWIDE HEALTH PLANNING AND DEVELOPMENT  
FACILITIES DEVELOPMENT DIVISION

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

OFFICE USE ONLY

APPLICATION #: OSP – 0506 – 10

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

Type: ☒ New ☐ Renewal

**Manufacturer Information**

Manufacturer: Carestream Health, Inc.

Manufacturer's Technical Representative: Ted Young

Mailing Address: 150 Verona Street, Rochester, NY 14608

Telephone: On File Email: On File

**Product Information**

Product Name: DRX Ascend

Product Type: Digital Radiography System

Product Model Number: See Attachment 1

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

General Description: Multiple component medical diagnostic imaging system. Seismic enhancements and modifications to address anomalies observed in testing shall be incorporated into the certified units.

Mounting Description: See Attachment 1.

**Applicant Information**


Applicant Company Name: EASE Co.

Contact Person: Jonathan Roberson, S.E.

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

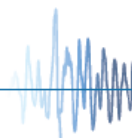
Telephone: (909) 606-7622 Email: [j.roberson@easeco.com](mailto:j.roberson@easeco.com)

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: 1/04/2017

Title: Principal Structural Engineer Company Name: EASE Co.

"Access to Safe, Quality Healthcare Environments that Meet California's Diverse and Dynamic Needs"





**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 Co.  
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

**Supports and Attachments Preapproval**

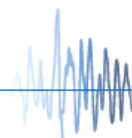
- ☐ Supports and attachments are preapproved under OPM-  
(Separate application for OSHPD Preapproval of Manufacturer's Certification (OPM) of Supports and attachments is required)
- ☒ Supports and attachments are not preapproved

**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





# OFFICE OF STATEWIDE HEALTH PLANNING AND DEVELOPMENT FACILITIES DEVELOPMENT DIVISION

## Seismic Parameters

Design in accordance with ASCE 7-10 Chapter 13: ☒ Yes ☐ No

Design Basis of Equipment or Components ( $F_p/W_p$ ) = See Attachment 1

$S_{DS}$  (Design spectral response acceleration at short period, g) = 2.0 (z/h = 1); 2.5 (z/h = 0)

$a_p$  (In-structure equipment or component amplification factor) = See Attachment 1

$R_p$  (Equipment or component response modification factor) = See Attachment 1

$\Omega_0$  (System overstrength factor) = See Attachment 1

$I_p$  (Importance factor) = 1.5

z/h (Height factor ratio) = 1 ( $S_{DS} = 2.0$ ); 0 ( $S_{DS} = 2.5$ )

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

Overall dimensions and weight (or range thereof) = See Attachment 1

Equipment or Components @ grade designed in accordance with ASCE 7-10 Chapter 15: ☐ Yes ☒ 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) = \_\_\_\_\_

$C_d$  (Deflection amplification factor) = \_\_\_\_\_

$I_p$  (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 ☒ No

## List of Attachments Supporting Special Seismic Certification

☒ Test Report(s) ☐ Drawings ☐ Calculations ☐ Manufacturer's Catalog

☒ Other(s) (Please Specify): Attachments 1 & 2

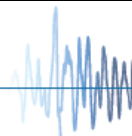
## OSHPD Approval (For Office Use Only) – Approval Expires on December 31, 2022

Signature: Ali Sumer Date: June 6, 2017

Print Name: Ali Sumer Title: DSE

Special Seismic Certification Valid Up to :  $S_{DS}$  (g) = See Above z/h = See Above

Condition of Approval (if applicable): \_\_\_\_\_



## ATTACHMENT 1: SEISMIC CERTIFIED COMPONENTS

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**TABLE 1:**

System Manufacturer		Carestream Health, Inc.											
System		DRX Ascend											
COMPONENT	IDENTIFICATION NO.	APPROX. DIMENSIONS (IN.)			MAX. WT. (LB.)	MOUNT	BASIS <sup>[1]</sup>	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>
		W	D	H									
OVERHEAD TUBE CRANES													
Overhead Tube Crane (3m bridge) (Siemens) including:	RS-590	24.38	118.12	32.67 / 103.54	765	Ceiling	UUT1	3.60 1.13	2.0 2.5	1 0	2 ½	2 ½	2
• Touch Screen User Interface (Carestream/Techvision)	QG-TV-IP-C												
• X-ray Tube (Varian)	Varian RAD-92												
• Collimator, Motorized (Carestream)	Linear MC150												
Overhead Tube Crane (3m bridge) (Siemens) including:	RS-590	24.38	118.12	32.67 / 103.54	760	Ceiling	UUT1	3.60 1.13	2.0 2.5	1 0	2 ½	2 ½	2
• Touch Screen User Interface (Carestream/Techvision)	QG-TV-IP-C												
• X-ray Tube (Varian)	Varian RAD-92												
• Collimator, Manual (Ralco)	R221/A DHHS												
PATIENT TABLES <sup>[2]</sup>													
Patient Table	QT-750	85.00	35.55	21 / 32.5	580	Rigid Base	UUT3	2.40 1.13	2.0 2.5	1 0	1	1 ½	1 ½
• DRX-Plus 4343 Detector	2272233101	46cm	46cm	1.6cm	8.2								
Patient Table	TT-750	85.00	35.55	21 / 32.5	580	Rigid Base	SAME	2.40 1.13	2.0 2.5	1 0	1	1 ½	1 ½
• DRX-Plus 4343 Detector	2272233101	46cm	46cm	1.6cm	8.2								
Patient Table	QT-750	85.00	35.55	21 / 32.5	580	Rigid Base	INT	2.40 1.13	2.0 2.5	1 0	1	1 ½	1 ½
• DRX-Plus 4343C Detector	2272233102												
• DRX-Plus 4343F Detector	2272233103												
• DRX-Plus 4343FC Detector	2272233104												
• DRX-Plus 3543 Detector	2272233001												
Patient Table	TT-750	85.00	35.55	21 / 32.5	580	Rigid Base	INT	2.40 1.13	2.0 2.5	1 0	1	1 ½	1 ½
• DRX-Plus 4343C Detector	2272233102												
• DRX-Plus 4343F Detector	2272233103												
• DRX-Plus 4343FC Detector	2272233104												
• DRX-Plus 3543 Detector	2272233001												

Table continues next page

**ATTACHMENT 1: SEISMIC CERTIFIED COMPONENTS**

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**TABLE 1:**

System Manufacturer		Carestream Health, Inc.												
System		DRX Ascend												
COMPONENT	IDENTIFICATION NO.	APPROX. DIMENSIONS (IN.)			MAX. WT. (LB.)	MOUNT	BASIS <sup>[1]</sup>	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>	
		W	D	H										
Patient Table	QT-750	85.00	35.55	21 / 32.5	580	Rigid Base	UUT4	2.40	2.0	1	1	1 ½	1 ½	
• DRX-Plus 3543C Detector	2272233002	38cm	46cm	1.6cm	6.8			1.13	2.5	0				
Patient Table	TT-750	85.00	35.55	21 / 32.5	580	Rigid Base	SAME	2.40	2.0	1	1	1 ½	1 ½	
• DRX-Plus 3543C Detector	2272233002	38cm	46cm	1.6cm	6.8			1.13	2.5	0				
WALL STANDS <sup>[2]</sup>														
Wallstand, Manual Tilting	QW-420-MT	34.1	27.15	84.0	389	Wall/Floor	UUT5	2.40	2.0	1	1	1 ½	1 ½	
• DRX-Plus 4343 Detector	2272233101	46cm	46cm	1.6cm	8.2			1.13	2.5	0				
Wallstand, Manual Tilting	TW-420-MT	34.1	27.15	84.0	389	Wall/Floor	SAME	2.40	2.0	1	1	1 ½	1 ½	
• DRX-Plus 4343 Detector	2272233101	46cm	46cm	1.6cm	8.2			1.13	2.5	0				
Wallstand, Manual Tilting	QW-420-MT	34.1	27.15	84.0	389	Wall/Floor	INT	2.40	2.0	1	1	1 ½	1 ½	
• DRX-Plus 4343C Detector	2272233102							1.13	2.5	0				
• DRX-Plus 4343F Detector	2272233103													
• DRX-Plus 4343FC Detector	2272233104													
• DRX-Plus 3543 Detector	2272233001													
Wallstand, Manual Tilting	TW-420-MT	34.1	27.15	84.0	389	Wall/Floor	INT	2.40	2.0	1	1	1 ½	1 ½	
• DRX-Plus 4343C Detector	2272233102							1.13	2.5	0				
• DRX-Plus 4343F Detector	2272233103													
• DRX-Plus 4343FC Detector	2272233104													
• DRX-Plus 3543 Detector	2272233001													
Wallstand, Manual Tilting	QW-420-MT	34.1	27.15	84.0	389	Wall/Floor	UUT6	2.40	2.0	1	1	1 ½	1 ½	
• DRX-Plus 3543C Detector	2272233002	38cm	46cm	1.6cm	6.8			1.13	2.5	0				
Wallstand, Manual Tilting	TW-420-MT	34.1	27.15	84.0	389	Wall/Floor	SAME	2.40	2.0	1	1	1 ½	1 ½	
• DRX-Plus 3543C Detector	2272233002	38cm	46cm	1.6cm	6.8			1.13	2.5	0				
POWER DISTRIBUTION														
Everest Generator <sup>[2]</sup>	QG80-16R-0979	25.4	16.7	24.1	166	Rigid Base	UUT7	1.44 1.13	2.0 2.5	1 0	1	2 ½	2	

Table continues next page

## ATTACHMENT 1: SEISMIC CERTIFIED COMPONENTS

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**TABLE 1:**

System Manufacturer	Carestream Health, Inc.												
System	DRX Ascend												
COMPONENT	IDENTIFICATION NO.	APPROX. DIMENSIONS (IN.)			MAX. WT. (LB.)	MOUNT	BASIS <sup>[1]</sup>	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>
		W	D	H									
USER INTERFACE													
Console w/ HP RP5 Model 5810 computer	DRX-1 System	19.75	14.5	8.5	34	Rigid Base	UUT8	1.44 1.13	2.0 2.5	1 0	1	2 ½	2
Dell 23" Touch Screen Monitor	DELL P2314T	22.4	4	16	10.7	Rigid Base	UUT9	1.44 1.13	2.0 2.5	1 0	1	2 ½	2
		22.4	3.25	16	12.7	Wall	UUT14	1.44 1.13	2.0 2.5	1 0	1	2 ½	2
HP 23" Touch Screen Monitor	HP S230TM	23.6	4	16	12.3	Rigid Base	UUT15	1.44 1.13	2.0 2.5	1 0	1	2 ½	2
		23.6	3.25	16	14.3	Wall	UUT10	1.44 1.13	2.0 2.5	1 0	1	2 ½	2
Wireless Access Point (D-Link)	D-Link DAP-2553	7.8	4.7	1.5	0.9	Rigid Base	UUT11	1.44 1.13	2.0 2.5	1 0	1	2 ½	2
ET Switch (D-Link)	D-Link GO-SW-8G	5.25	3	1.2	0.7	Rigid Base	UUT12	1.44 1.13	2.0 2.5	1 0	1	2 ½	2
Keyboard (HP)	HP KU-0316	18	6.75	0.75	2	Rigid Base	UUT13	1.44 1.13	2.0 2.5	1 0	1	2 ½	2
Prep Expose Switch	QV-CS-CB	5	2.75	1.3	1.5	Rigid Base	UUT16	1.44 1.13	2.0 2.5	1 0	1	2 ½	2
Mount	<u>FLOOR (RIGID BASE):</u> free-standing, base-mounted condition with the component rigidly attached to a supporting structure and no lateral support above the base. <u>WALL:</u> unit is fully supported- both vertically and laterally – by a building wall or partition. <u>CEILING (SUSPENDED):</u> unit is anchored to and suspended from a framing system at or slightly above the ceiling line of the room <u>WALL/FLOOR WALL/FLOOR:</u> unit bears on and is anchored to the supporting floor. In addition, lateral restraint anchoring the unit to an adjacent wall or other supporting structure is provided along the height of the equipment.												
Notes	<div>1. 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 identical to test specimen. Difference is limited to model number, color, or software.</li><li>• INT (Interpolate/Extrapolate): indicates a model that was not specifically tested, and by which seismic certification is established through evaluation of testing of other, similar models in the product line.</li></ul></div> <div>2. Requires use of Carestream Seismic Kit (P/N AE7674) or equivalent.</div> <div>3. Weight of wall stand includes grid and excludes weight of detector.</div> <div>4. Patient Table weight does not include 520 lb. simulated patient load or detector.</div>												

**ATTACHMENT 2: SEISMIC CERTIFIED COMPONENTS**

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UUT1 Overhead Tube Crane w/ 3m Bridge & Motorized Collimator																													
MANUFACTURER:				Carestream Health Inc.																									
IDENTIFICATION:				Model No.: RS-590																									
DESCRIPTION:				<div>Component of DRX Ascend Digital Radiography System</div> <div>Manual movement along longitudinal &amp; transverse axes.</div> <div>Motorized tracking on vertical axis.</div> <div>Tube Stand 3D V w/ 3m Bridge (Siemens)</div> <div>Installed options include:</div> <div><div><div>TUI (Carestream /Tech Vision QG-TV-IP-C)</div><div>X-Ray Tube Housing (Varian Sapphire)</div><div>X-Ray Tube Insert (Varian RAD-92)</div><div>Collimator. Motorized (Carestream Linear MC150)</div></div></div>																									
MOUNTING:				<div>Ceiling Mounted using:</div> <div>(2) – 3/8" socket head screws zinc coated w/ Unistrut channel nut w/ spring. (torque=19 ft-lb)</div> <div>Typ. each of 6 Unistrut support points along each Longitudinal Rail.</div>																									
<div>PROPERTIES:</div> <table><tr><th colspan="3">DIMENSIONS (in.)</th><th rowspan="2">Weight (lb.)</th><th colspan="3">LOWEST RESONANT FREQUENCY (Hz.)</th></tr><tr><th>Width</th><th>Depth</th><th>Height</th><th>Transv-Axis</th><th>Longit.-Axis</th><th>Vert-Axis</th></tr><tr><td>24.40</td><td>118.12</td><td>32.67 /103.54</td><td>765</td><td>4.16</td><td>2.95</td><td>6.16</td></tr></table>										DIMENSIONS (in.)			Weight (lb.)	LOWEST RESONANT FREQUENCY (Hz.)			Width	Depth	Height	Transv-Axis	Longit.-Axis	Vert-Axis	24.40	118.12	32.67 /103.54	765	4.16	2.95	6.16
DIMENSIONS (in.)			Weight (lb.)	LOWEST RESONANT FREQUENCY (Hz.)																									
Width	Depth	Height		Transv-Axis	Longit.-Axis	Vert-Axis																							
24.40	118.12	32.67 /103.54	765	4.16	2.95	6.16																							
SHAKE TABLE TEST PARAMETERS																													
CODE	TEST CRITERIA	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)																					
CBC 2016	ICC-ES AC156	2.0 2.5	1 0	1.5	3.20	2.40	1.68	0.68																					
Unit maintained structural integrity and remained functional per manufacturer requirement after AC156 test.																													


UUT2 Overhead Tube Crane w/ 3m Bridge & Manual Collimator									
MANUFACTURER: Carestream Health Inc.									
IDENTIFICATION: Model No.: RS-590									
DESCRIPTION: Component of DRX Ascend Digital Radiography System Manual movement along longitudinal & transverse axes. Motorized tracking on vertical axis. Tube Stand 3D V w/ 3m Bridge (Siemens) <u>Installed options include:</u> <ul style="list-style-type: none"><li>TUI (Carestream /Tech Vision QG-TV-IP-C)</li><li>X-Ray Tube Housing (Varian Sapphire)</li><li>X-Ray Tube Insert (Varian RAD-92)</li><li>Collimator. Manual (Ralco R221/A DHHS)</li></ul>									
MOUNTING: Ceiling Mounted using: (2) – 3/8" socket head screws zinc coated w/ Unistrut channel nut w/ spring. (torque=19 ft-lb) Typ. each of 6 Unistrut support points along each Longitudinal Rail.									
PROPERTIES:									
DIMENSIONS (in.)				Weight (lb.)	LOWEST RESONANT FREQUENCY (Hz.)				
Width	Depth	Height			Transv-Axis	Longit.-Axis	Vert-Axis		
24.40	118.12	32.67 /103.54			760	4.13	3.25	13.14	
SHAKE TABLE TEST PARAMETERS									
CODE	TEST CRITERIA	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)	
CBC 2016	ICC-ES AC156	2.0 2.5	1 0	1.5	3.20	2.40	1.68	0.68	
Unit maintained structural integrity and remained functional per manufacturer requirement after AC156 test.									



**ATTACHMENT 2: SEISMIC CERTIFIED COMPONENTS**

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UUT3			Patient Table w/ DRX-Plus 4343 Detector					
MANUFACTURER:	Carestream Health Inc.							
IDENTIFICATION:	Model No.: QT-750							
DESCRIPTION:	Component of DRX Ascend digital radiography system Elevating Float-Top Radiographic Table <u>Installed options:</u> <ul style="list-style-type: none"><li>DRX-Plus 4343 Wireless portable digital detector</li><li>X-Ray Anti-Scatter Grid</li></ul> 520 Patient load Unit included enhancements not found on standard production units. Subsequent to testing, these modifications were collected into a manufacturer-installed option package (Carestream P/N AE7674).							
MOUNTING:	Rigid Base (Floor) mounted using: (6) - ½" DIA GR socket head cap screws w/ washers (Torque = 40 ft-lb)							
PROPERTIES:								
DIMENSIONS (in.)			Weight (lb.)	LOWEST RESONANT FREQUENCY (Hz.)				
Width	Depth	Height		Front-Axis	Side-Axis	Vert-Axis		
85.0	35.55	21.0 / 32.5	580.0	4.88	19.97	5.90		
SHAKE TABLE TEST PARAMETERS								
CODE	TEST CRITERIA	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)
CBC 2016	ICC-ES AC156	2.0 2.5	1 0	1.5	3.20	2.40	1.68	0.68
Unit maintained structural integrity and remained functional per manufacturer requirement after AC156 test.								


UUT4			Patient Table w/ DRX-Plus 3543C Detector					
MANUFACTURER:	Carestream Health Inc.							
IDENTIFICATION:	Model No.: QT-750							
DESCRIPTION:	Component of DRX Ascend digital radiography system Elevating Float-Top Radiographic Table <u>Installed options:</u> <ul style="list-style-type: none"><li>• DRX-Plus 3543C Wireless portable digital detector</li><li>• X-Ray Anti-Scatter Grid</li></ul> 520 Patient load Unit included enhancements not found on standard production units. Subsequent to testing, these modifications were collected into a manufacturer-installed option package (Carestream P/N AE7674).							
MOUNTING:	Rigid Base (Floor) mounted using: (6) - ½" DIA GR socket head cap screws w/ washers (Torque = 40 ft-lb)							
PROPERTIES:								
DIMENSIONS (in.)			Weight (lb.)	LOWEST RESONANT FREQUENCY (Hz.)				
Width	Depth	Height		Front-Axis	Side-Axis	Vert-Axis		
85.0	35.55	21.0 / 32.5	580.0	4.12	23.86	6.81		
SHAKE TABLE TEST PARAMETERS								
CODE	TEST CRITERIA	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)
CBC 2016	ICC-ES AC156	2.0 2.5	1 0	1.5	3.20	2.40	1.68	0.68
Unit maintained structural integrity and remained functional per manufacturer requirement after AC156 test.								



**ATTACHMENT 2: SEISMIC CERTIFIED COMPONENTS**

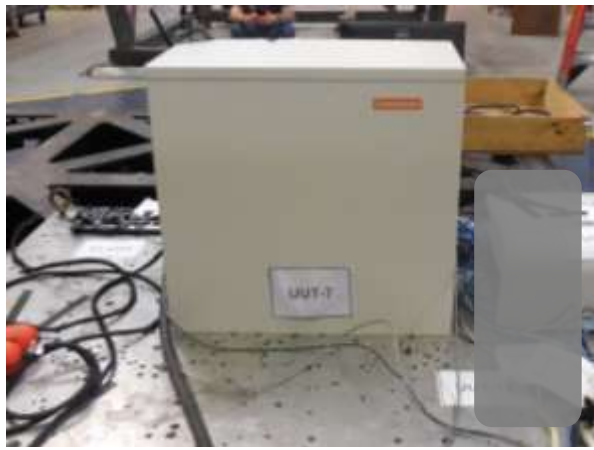
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UUT5 Manual Tilting Wallstand w/ DRX-Plus 4343 Detector										
MANUFACTURER:				Carestream Health Inc.						
IDENTIFICATION:				Model No.: QW-420-MT						
DESCRIPTION:				<div>Component of DRX Ascend digital radiography system</div> <div>Installed options:</div> <div><div><div>• DRX-Plus 4343 Wireless portable digital detector</div><div>• X-Ray Anti-Scatter Grid</div><div>• 4" Extension Box</div></div></div> <div>Unit included enhancements not found on standard production units. Subsequent to testing, these modifications were collected into a manufacturer-installed option package (Carestream P/N AE7674).</div>						
MOUNTING:				<div>Wall/Floor Mounted using:</div> <div>(4) – ½" dia GR 8 bolts to floor and</div> <div>(4) – 3/8" dia GR 8 bolts to wall.</div> <div>All bolts include washers.</div>						
										
PROPERTIES:										
DIMENSIONS (in.)						LOWEST RESONANT FREQUENCY (Hz.)				
Width		Depth		Height		Weight (lb.)		Side-Axis	Front-Axis	Vert-Axis
34.1		27.15		84.0		389.0		5.76	7.13	10.55
SHAKE TABLE TEST PARAMETERS										
CODE	TEST CRITERIA	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)		
CBC 2016	ICC-ES AC156	2.0 2.5	1 0	1.5	3.20	2.40	1.68	0.68		
Unit maintained structural integrity and remained functional per manufacturer requirement after AC156 test.										

UUT6 Manual Tilting Wallstand w/ DRX-Plus 3543C Detector									
MANUFACTURER:			Carestream Health Inc.						
IDENTIFICATION:			Model No.: QW-420-MT						
DESCRIPTION:			<div>Component of DRX Ascend digital radiography system</div> <div>Installed options:</div> <div><ul style="list-style-type: none"><li>• DRX-Plus 3543C Wireless portable digital detector</li><li>• X-Ray Anti-Scatter Grid</li><li>• 4" Extension Box</li></ul></div> <div>Unit included enhancements not found on standard production units. Subsequent to testing, these modifications were collected into a manufacturer-installed option package (Carestream P/N AE7674).</div>						
MOUNTING:			<div>Wall/Floor Mounted using:</div> <div>(4) – ½" dia GR 8 bolts to floor and</div> <div>(4) – 3/8" dia GR 8 bolts to wall.</div> <div>All bolts include washers.</div>						
									
PROPERTIES:									
DIMENSIONS (in.)					LOWEST RESONANT FREQUENCY (Hz.)				
Width	Depth	Height	Weight (lb.)	Side-Axis	Front-Axis	Vert-Axis			
34.1	27.15	84.0		389.0	6.03	6.79	11.59		
SHAKE TABLE TEST PARAMETERS									
CODE	TEST CRITERIA	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)	
CBC 2016	ICC-ES AC156	2.0 2.5	1 0	1.5	3.20	2.40	1.68	0.68	
Unit maintained structural integrity and remained functional per manufacturer requirement after AC156 test.									

**ATTACHMENT 2: SEISMIC CERTIFIED COMPONENTS**


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UUT7 Everest Generator								
MANUFACTURER:		Carestream Health Inc.						
IDENTIFICATION:		Model no.: QG-80G						
DESCRIPTION:		Component of DRX Ascend digital radiography system High Voltage X-Ray Generator  Unit included enhancements not found on standard production units. External braced bracket (Carestream P/N AE7038-A) mounted to the rear of the unit stiffens the cabinet and provides an additional two points for anchorage.						
MOUNTING:		Rigid Base (Floor) Mounted using: (6) – ¼”-20 hex head machine screws in tapped holes of aluminum plate.						
								
PROPERTIES:								
DIMENSIONS (in.)			Weight (lb.)	LOWEST RESONANT FREQUENCY (Hz.)				
Width	Depth	Height		Side-Axis	Front-Axis	Vert-Axis		
25.4	16.7	24.1	166	>50	39.4	>50		
SHAKE TABLE TEST PARAMETERS								
CODE	TEST CRITERIA	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)
CBC 2016	ICC-ES AC156	2.0 2.5	1 0	1.5	3.20	2.40	1.68	0.68
Unit maintained structural integrity and remained functional per manufacturer requirement after AC156 test.								

UUT8		Console						
MANUFACTURER:		Carestream Health Inc.						
IDENTIFICATION:		Model No.: DRX-1 System						
DESCRIPTION:		Component of DRX Ascend digital radiography system Includes HP RP5 Model 5810 computer						
MOUNTING:		Rigid Base (Floor) Mounted using: (4) – ¼"-20 hex head machine screws in tapped holes of aluminum plate.						
								
PROPERTIES:								
DIMENSIONS (in.)			Weight (lb.)	LOWEST RESONANT FREQUENCY (Hz.)				
Width	Depth	Height		Side-Axis	Front-Axis	Vert-Axis		
19.75	14.5	8.5	34	41.5	26.9	29.3		
SHAKE TABLE TEST PARAMETERS								
CODE	TEST CRITERIA	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)
CBC 2016	ICC-ES AC156	2.0 2.5	1 0	1.5	3.20	2.40	1.68	0.68
Unit maintained structural integrity and remained functional per manufacturer requirement after AC156 test.								

**ATTACHMENT 2: SEISMIC CERTIFIED COMPONENTS**


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UUT9		Dell Monitor 23" LCD						
MANUFACTURER:	Dell							
IDENTIFICATION:	Model No.: P2314T							
DESCRIPTION:	Component of DRX Ascend Digital Radiography System							
MOUNTING:	Rigid Base Mounted using: Carestream-provided monitor mount (2.5mm cold formed steel) to ¾" thick plywood base w/ (3) – ¼" -20 hex head machine screws & washers w/ nuts & washers on back side							
								
PROPERTIES:								
DIMENSIONS (in.)			Weight (lb.)	LOWEST RESONANT FREQUENCY (Hz.)				
Width	Depth	Height		Side-Axis	Front-Axis	Vert-Axis		
22.4	4	16	10.7	6.6	3.9	3.9		
SHAKE TABLE TEST PARAMETERS								
CODE	TEST CRITERIA	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)
CBC 2016	ICC-ES AC156	2.0 2.5	1 0	1.5	3.20	2.40	1.68	0.68
Unit maintained structural integrity and remained functional per manufacturer requirement after AC156 test.								

UUT10			HP 23" LCD Monitor					
MANUFACTURER:		HP						
IDENTIFICATION:		Model No.: HP S230tm						
DESCRIPTION:		Component of DRX Ascend Digital Radiography System						
MOUNTING:		Wall Mounted using: Carestream-provided monitor mount (2.5mm cold formed steel) w/ (4) 1/4" dia HWH TEK Screws through 5/8" gypsum board to 3/16" steel backing.						
PROPERTIES:								
DIMENSIONS (in.)			Weight (lb.)	LOWEST RESONANT FREQUENCY (Hz.)				
Width	Depth	Height		Side-Axis	Front-Axis	Vert-Axis		
23.6	3.25	16	14.3	14.69	8.41	8.44		
SHAKE TABLE TEST PARAMETERS								
CODE	TEST CRITERIA	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)
CBC 2016	ICC-ES AC156	2.0 2.5	1 0	1.5	3.20	2.40	1.68	0.68
Unit maintained structural integrity and remained functional per manufacturer requirement after AC156 test.								

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UUT11		Wireless Access Point						
MANUFACTURER:		D-Link						
IDENTIFICATION:		Model No.: DAP-2553						
DESCRIPTION:		Component of DRX Ascend Digital Radiography System						
MOUNTING:		Rigid Base (Floor) Mounted using: (2) lines of ½" x 4.5" 3M Dual Lock SJ3541 (TYPE 400) mated to SJ3542 (TYPE 170 )						
								
PROPERTIES:								
Note: Dimensions exclude antennas								
DIMENSIONS (in.)			Weight (lb.)	LOWEST RESONANT FREQUENCY (Hz.)				
Width	Depth	Height		Front-Axis	Side-Axis	Vert-Axis		
7.8	4.7	1.5	0.9	>50	43.25	>50		
SHAKE TABLE TEST PARAMETERS								
CODE	TEST CRITERIA	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)
CBC 2016	ICC-ES AC156	2.0 2.5	1 0	1.5	3.20	2.40	1.68	0.68
Unit maintained structural integrity and remained functional per manufacturer requirement after AC156 test.								


UUT12			ET Switch					
MANUFACTURER:		D-Link						
IDENTIFICATION:		Model No.: GO-SW-8G						
DESCRIPTION:		Component of DRX Ascend Digital Radiography System						
MOUNTING:		Rigid Base (Floor) Mounted using: (2) lines of ½" x 3.5" 3M Dual Lock SJ3541 (TYPE 400) mated to SJ3542 (TYPE 170 )						
								
PROPERTIES:								
DIMENSIONS (in.)			Weight (lb.)	LOWEST RESONANT FREQUENCY (Hz.)				
Width	Depth	Height		Front-Axis	Side-Axis	Vert-Axis		
5.25	3	1.2	0.7	>50	>50	n/a*		
SHAKE TABLE TEST PARAMETERS								
CODE	TEST CRITERIA	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)
CBC 2016	ICC-ES AC156	2.0 2.5	1 0	1.5	3.20	2.40	1.68	0.68
Unit maintained structural integrity and remained functional per manufacturer requirement after AC156 test.								



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UUT13				Keyboard													
MANUFACTURER:		Carestream Health Inc.															
IDENTIFICATION:		Model No.: KU-0316															
DESCRIPTION:		Component of DRX Ascend Digital Radiography System															
MOUNTING:		Rigid Base (Floor) Mounted using: (2) lines of ½" x 5.25" 3M Dual Lock SJ3541 (TYPE 400) mated to SJ3542 (TYPE 170 )															
																	
PROPERTIES:																	
DIMENSIONS (in.)						LOWEST RESONANT FREQUENCY (Hz.)											
Width		Depth		Height		Weight (lb.)		Front-Axis		Side-Axis		Vert-Axis					
18		6.75		0.75		2		>50		>50		27.9					
SHAKE TABLE TEST PARAMETERS																	
CODE		TEST CRITERIA		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)	
CBC 2016		ICC-ES AC156		2.0 2.5		1 0		1.5		3.20		2.40		1.68		0.68	
Unit maintained structural integrity and remained functional per manufacturer requirement after AC156 test.																	

UUT14			Dell 23" LCD Monitor					
MANUFACTURER:		Dell						
IDENTIFICATION:		Model No.: P2314T						
DESCRIPTION:		Component of DRX Ascend Digital Radiography System						
MOUNTING:		Wall Mounted using: Carestream-provided monitor mount (2.5mm cold formed steel) w/ (4) 1/4" dia HWH TEK Screws through 5/8" gypsum board to 3/16" steel backing.						
								
PROPERTIES:								
DIMENSIONS (in.)				Weight (lb.)	LOWEST RESONANT FREQUENCY (Hz.)			
Width	Depth	Height			Front-Axis	Side-Axis	Vert-Axis	
22.4	3.25	16		12.7	14.40	9.62	9.68	
SHAKE TABLE TEST PARAMETERS								
CODE	TEST CRITERIA	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)
CBC 2016	ICC-ES AC156	2.0 2.5	1 0	1.5	3.20	2.40	1.68	0.68
Unit maintained structural integrity and remained functional per manufacturer requirement after AC156 test.								

**ATTACHMENT 2: SEISMIC CERTIFIED COMPONENTS**

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<b>UUT15 HP 23" LCD Monitor</b>	
<b>MANUFACTURER:</b>	HP
<b>IDENTIFICATION:</b>	Model No.: HP S230tm
<b>DESCRIPTION:</b>	Component of DRX Ascend Digital Radiography System
<b>MOUNTING:</b>	Rigid Base Mounted using Carestream-provided monitor mount (2.5mm cold formed steel) to ¾" thick plywood base w/ (3) – ¼" -20 hex head machine screws & washers w/ nuts & washers on back side.




<b>PROPERTIES:</b>							
DIMENSIONS (in.)				Weight (lb.)	LOWEST RESONANT FREQUENCY (Hz.)		
Width	Depth	Height	Front-Axis		Side-Axis	Vert-Axis	
23.6	4	16	12.3	5.68	3.36	3.34	

<b>SHAKE TABLE TEST PARAMETERS</b>								
CODE	TEST CRITERIA	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)
CBC 2016	ICC-ES AC156	2.0 2.5	1 0	1.5	3.20	2.40	1.68	0.68

Unit maintained structural integrity and remained functional per manufacturer requirement after AC156 test.

<b>UUT16 Prep Expose Switch</b>	
<b>MANUFACTURER:</b>	Carestream Health Inc.
<b>IDENTIFICATION:</b>	Model No.: QV-CS-CB
<b>DESCRIPTION:</b>	Component of DRX Ascend Digital Radiography System
<b>MOUNTING:</b>	Rigid Base (Floor) Mounted using: (2) lines of ½" x 4.75" 3M Dual Lock SJ3541 (TYPE 400) mated to SJ3542 (TYPE 170 )



<b>PROPERTIES:</b>							
DIMENSIONS (in.)				Weight (lb.)	LOWEST RESONANT FREQUENCY (Hz.)		
Width	Depth	Height	Front-Axis		Side-Axis	Vert-Axis	
5	2.75	1.3	1.5	>50	>50	>50	

<b>SHAKE TABLE TEST PARAMETERS</b>								
CODE	TEST CRITERIA	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)
CBC 2016	ICC-ES AC156	2.0 2.5	1 0	1.5	3.20	2.40	1.68	0.68

Unit maintained structural integrity and remained functional per manufacturer requirement after AC156 test.