



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

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

OFFICE USE ONLY

APPLICATION #: OSP – 0520 – 10

OSHPD Special Seismic Certification Preapproval (OSP)

Type: New Renewal

Manufacturer Information

Manufacturer: Philips Medical Systems DMC GmbH

Manufacturer's Technical Representative: Ming Xiao

Mailing Address: Roentgenstrasse 24, 22335 Hamburg

Telephone: ON FILE

Email: ON FILE

Product Information

Product Name: CombiDiagnost R90

Product Type: Radiography/Fluoroscopy medical diagnostic imaging system

Product Model Number: See Attachment 1

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

General Description: Cross functional DRF system. Multiple component system for the provision of radiography & fluoroscopy medical diagnostic imaging. Seismic certification is limited to system components listed in Attachment 1 Table 1. Seismic enhancements incorporated into the test units and enhancements required to address anomalies observed during the tests shall be incorporated into the certified units.

Mounting Description: See Attachment 1, Table 1.

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: (406) 541-EASE (3273)

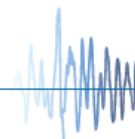
Email: j.roberson@easeco.com

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: November 7, 2018

Title: Principal Engineer Company Name: EASE LLC

"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 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

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): _____

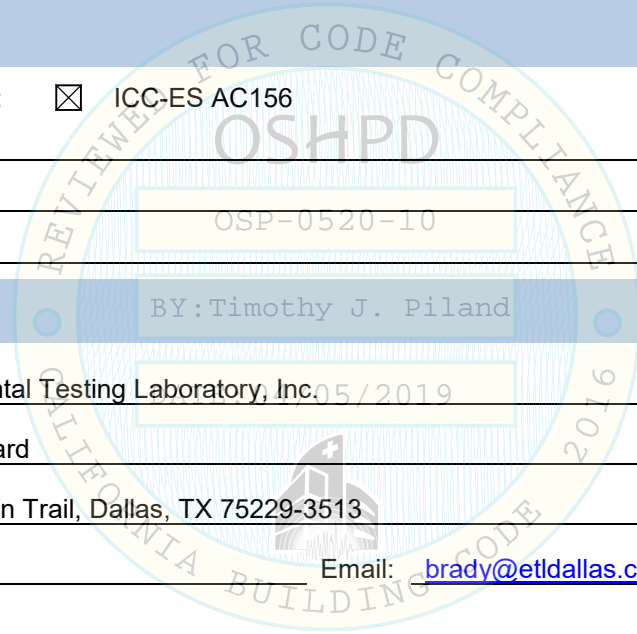
Testing Laboratory

Company Name: Environmental Testing Laboratory, Inc. 05/2019

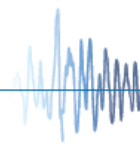
Contact Name: Brady Richard

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

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



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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, Table 1

S_{DS} (Design spectral response acceleration at short period, g) = See Attachment 1

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

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

Ω_0 (System overstrength factor) = See Attachment 1

I_p (Importance factor) = 1.5

z/h (Height factor ratio) = See Attachment 1

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) = OSP-0520-10

Ω_0 (System overstrength factor) = _____

C_d (Deflection amplification factor) = BY: Timothy J. Piland

I_p (Importance factor) = 1.5

Height to Center of Gravity above base = DATE: 04/05/2019

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

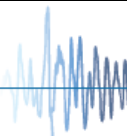
OSHPD Approval (For Office Use Only) – Approval Expires on December 31, 2022

Signature: Date: April 5, 2019

Print Name: Timothy J. Piland 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 COMPONENTS

TABLE 1:

System Manufacturer		Philips Medical System DMC GmbH											
System		CombiDiagnost R90											
COMPONENT	MODEL NUMBER	APPROX. DIMENSIONS (IN.)			MAX. WT. (LB.)	MOUNT	BASIS [1]	F _p /W _p	S _{Ds}	z/h	a _p	R _p	Ω ₀
		W	D	H									
GEOMETRY STAND													
CombiDiagnost R90 Stand (Villa Systems Medical, SpA.)	9890-010-70151	93.93 – 153.3	80.35	109.17 – 140.66	2976	Rigid Base	1701-2	2.40 1.13	2.0 2.5	1 0	1	1 ½	1 ½
Stand Geo Gridswitch	4512-202-03251												
OSHPD floorplate large	9890-010-70231	75	38.66	0.79	646								
MONITOR SUSPENSIONS													
Monitor Suspension (Ondal) (3 monitors / 2BNC/1Eth)	4512-202-03681	72.44	33.86	53.14	252 [6]	Suspended	1701-5	3.60 1.50	2.0 2.5	1 0	2 ½	2 ½	2
Monitor 21" (Examination Room) FIMI S.r.1	9919 324 72042	19.48	4.25	16.73	15.65								
Monitor 19" B/W (EasyDiagnost ExamRoom) FIMI S.r.1 (x2)	9919 322 52192	16.76	3.81	14.79	11.9								
Monitor Suspension (3 monitors / 3Eth) (Ondal)	4512-202-03351	72.44	33.85	53.14	252 [6]	Suspended	INT	3.60 1.50	2.0 2.5	1 0	2 ½	2 ½	2
Monitor Suspension (2 monitors / 2 Eth) (Ondal)	4512-202-03341	72.44	33.85	53.14	227 [6]	Suspended	INT	3.60 1.50	2.0 2.5	1 0	2 ½	2 ½	2
Monitor Suspension (2 monitors / 2 BNC) (Ondal)	4512-202-03671	72.44	33.85	53.14	227 [6]	Suspended	INT	3.60 1.50	2.0 2.5	1 0	2 ½	2 ½	2
Monitor Suspension (1 monitor / 1 BNC) (Ondal)	4512-202-03661	72.44	33.85	53.14	192 [6]	Suspended	INT	3.60 1.50	2.0 2.5	1 0	2 ½	2 ½	2
Monitor Suspension (1 monitor / 1 Eth) (Ondal)	4512-202-03331	72.44	33.85	53.14	192 [6]	Suspended	1701-6	3.60 1.50	2.0 2.5	1 0	2 ½	2 ½	2
Monitor 21" (Examination Room) FIMI S.r.1	9919 324 72042	19.48	4.25	16.73	15.65								
WALL STANDS													
Vertical Stand VS1 tilting w/ Skyplate Detector		23.5	35.5	81.9	562	Wall/Floor	1701-7	2.40 1.13	2.0 2.5	1 0	1	1 ½	1 ½
Vertical Stand VS1	9890-010-83641												
Tilting unit VS1 "in"	4512-201-07223												
Bucky Unit 2 SkyPlate	4512-201-10361												
Skyplate detector Large (Trixell)	9897-010-02681	15.1"	18.1"	0.63"	6.6 lb								

Table continues next page

ATTACHMENT 1: SEISMIC CERTIFIED COMPONENTS

TABLE 1:

System Manufacturer		Philips Medical System DMC GmbH											
System		CombiDiagnost R90											
COMPONENT	MODEL NUMBER	APPROX. DIMENSIONS (IN.)			MAX. WT. (LB.)	MOUNT	BASIS [1]	F _P /W _P	S _{Ds}	z/h	a _P	R _P	Ω ₀
		W	D	H									
Vertical Stand VS1 tilting w/ Skyplate Detector													
Vertical Stand VS1	9890-010-83641												
Tilting unit VS1 "in"	4512-201-11871	23.5	35.5	81.9	562	Wall/Floor	SAME	2.40 1.13	2.0 2.5	1 0	1	1 ½	1 ½
Bucky Unit 2 SkyPlate	4512-201-11921												
Skyplate detector Large (Trixell)	9897-010-02681	15.1"	18.1"	0.63"	6.6 lb								
Vertical Stand 2 (VS2) tilting with Skyplate Detector													
Vertical Stand 2 (VS2)	9897-010-01411												
Tilting Module motorized	4598-006-89331	23.5	35.5	81.9	562	Wall/Floor	1701-8	2.40 1.13	2.0 2.5	1 0	1	1 ½	1 ½
Bucky Unit 2 SkyPlate	4512-201-10361												
Skyplate detector Large (Trixell)	9897-010-02681	15.1"	18.1"	0.63"	6.6 lb								
Vertical Stand 2 (VS2) tilting with Skyplate Detector													
Vertical Stand 2 (VS2)	9897-010-01411												
Tilting Module motorized	4598-006-89331	23.5	35.5	81.9	562	Wall/Floor	SAME	2.40 1.13	2.0 2.5	1 0	1	1 ½	1 ½
Bucky Unit 2 SkyPlate	4512-201-11921												
Skyplate detector Large (Trixell)	9897-010-02681	15.1"	18.1"	0.63"	6.6 lb								
X-RAY TUBE SUSPENSIONS													
Ceiling Suspension CSM Version Comfort Move (Long or Short version)	9890-010-87702	92.8 – 159.0	31.0	34.29 – 99.52 [7]	683 [6]	Suspended	1701-3 1701-4	3.60 1.50	2.0 2.5	1 0	2 ½	2 ½	2
CSM Tubemount alphadrive	4512-201-10951												
SYSTEM CONTROL													
M-Cabinet Model: M-Cabinet RF	4512-202-03621	21.7	20.5	77	420	Wall/Floor	1701-10	1.44 1.13	2.0 2.5	1	1	2 ½	2
Geometry Cabinet Model: Stand Geo Cabinet assy Villa Sistemi Medicali, Italy	4512-202-03591	21.7	20.5	77	485	Wall/Floor	1701-11	1.44 1.13	2.0 2.5	1	1	2 ½	2
Eleva Workspot (PC) Model: AWS-DI MSC Technologies Systems	4512-202-03301	6.7	17.0	17.0	32	Floor	1701-12	1.44 1.13	2.0 2.5	1	1	2 ½	2

Table continues next page

ATTACHMENT 1: SEISMIC CERTIFIED COMPONENTS

TABLE 1:

<i>System Manufacturer</i>		Philips Medical System DMC GmbH												
<i>System</i>		CombiDiagnost R90												
COMPONENT	MODEL NUMBER	APPROX. DIMENSIONS (IN.)			MAX. WT. (LB.)	MOUNT	BASIS ^[1]	F _p /W _p	S _{Ds}	z/h	a _p	R _p	Ω ₀	
		W	D	H										
POWER DISTRIBUTION ^[4]														
X-ray high Voltage Generator Model: Velara GCF 2T	9890-000-70307	21.7	20.5	77	745.2	Wall/Floor	1701-9	1.44 1.13	2.0 2.5	1	1	2 ½	2	
USER INTERFACE														
Monitor 21" Touch Fimi S.r.l.	4512-202-03451	19.4	9.2	17.3	19.4	Rigid Base	1701-13	1.44 1.13	2.0 2.5	1	1	2 ½	2	
Monitor 21" Touch Fimi S.r.l.	4512-202-03452	19.4	9.2	17.3	19.4	Rigid Base	INT	1.44 1.13	2.0 2.5	1	1	2 ½	2	
Monitor 21" Fimi S.r.l.	4512-202-03462	19.4	9.2	17.3	19.4	Rigid Base	INT	1.44 1.13	2.0 2.5	1	1	2 ½	2	
Monitor 21" Fimi S.r.l.	4512-202-03461	19.4	9.2	17.3	19.4	Rigid Base	1701-14	1.44 1.13	2.0 2.5	1	1	2 ½	2	
Geo Touch Screen Console Villa Sistemi Medicali,	4512-134-69651	14	14	4.25	12	Rigid Base	1701-15	1.44 1.13	2.0 2.5	1	1	2 ½	2	
Keyboard (Country Kit AWS USA) Cherry	4512-201-04984	19	8	1.8	2	Rigid Base	1701-16	1.44 1.13	2.0 2.5	1	1	2 ½	2	
MISC														
WiFi-Access Point (Cisco AIR-SAP1602I-B-K9)	4512-201-11791	8.7	8.7	1.9	2	Wall	1703-9	1.44 1.13	2.0 2.5	1	1	2 ½	2	
USB Infrared Adapter	4512-201-10483	4.5	6	9.75	1	Rigid Base	1701-18	1.44 1.13	2.0 2.5	1	1	2 ½	2	
<i>Mount</i>	<p><u>Floor (Rigid Base)</u>: free-standing, base-mounted tower configuration with the component rigidly attached to a supporting structure and no lateral support above the base.</p> <p><u>Wall</u>: component fully supported by a building wall structure</p> <p><u>Wall/Floor</u>: component bears on, and is anchored directly 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.</p> <p><u>Suspended</u>: component is anchored to and suspended from a framing system at or slightly above the ceiling line of the room.</p>													
<i>Notes</i>	<ol style="list-style-type: none"> BASIS: <ul style="list-style-type: none"> UUT#: Indicates that a unit matching these characteristics was tested as part of this testing program. INT (Interpolate/Extrapolate): indicates a model not specifically tested, and by which seismic certification is established through evaluation of testing of other, similar models in the product line. SAME: Model is physically, mechanically & electrically the same as test specimen. Difference is limited to model number, color, and/or software. All components are manufactured by Philips Medical System DMC GmbH unless otherwise noted in component description. Patient table weight does not include the 500 lb. patient load present during testing Monitor Suspension weights exclude the weight of longitudinal rails. UUT modified at test facility to address anomalies observed during testing. Excludes the weight of longitudinal rails (3.96 lb/ft per rail). Measured top of longitudinal rails to focal point. 													

ATTACHMENT 2: TEST SPECIMEN SUMMARY


UUT1701-2 Combiagnost R90 Stand						
MANUFACTURER: Villa Systems Medical, SpA.						
IDENTIFICATION: Combiagnost R90 Stand 9890-010-70151 Stand Geo Gridswitch 4512-202-03251 OSHPD floorplate large 9890-010-70231						
DESCRIPTION: Component of the CombiDiagnost R90 dRF System UNIT MODIFIED FOR TEST Modification will be incorporated into all standard manufactured units.						
MOUNTING: <u>Rigid Base (Floor) Mounted w/</u> (8) – M12-CL12.9 bolts unit to OSHPD floorplate large. (8) – 3/4" dia. Grade 8 bolts OSHPD floorplate large to test fixture.						
DIMENSIONS (in.)				LOWEST RESONANT FREQUENCY (Hz.)		
Width	Depth	Height	Weight (lb.)	Longit. (X)- Axis	Transv. (Y) - Axis	Vert (Z) - Axis
93.9 – 153.3	80.35	81.6 – 140.6	2976	3.0	2.51	3.2
ICC-ES AC156 SHAKE TABLE TEST PARAMETERS						CODE: 2016 CBC
S _{DS} (G)	z/h	I _P	A _{FLX-H} (G)	A _{RIG-H} (G)	A _{FLX-V} (G)	A _{RIG-V} (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.						




UUT1701- 3 Ceiling Suspension CSM w/ Comfort Move & Long (4m) Bridge						
MANUFACTURER: Philips Medical System DMC GmbH						
IDENTIFICATION: Ceiling Suspension CSM w/ Comfort Move & Long (4m) Bridge 9890-010-87702 CSM Tubemount alphadrive 4512-201-10951						
DESCRIPTION: Component of the CombiDiagnost R90 dRF & DigiDiagnost systems Ceiling Suspension CSM w/ the following: Comfort Move (Motorized vertical and rotational movement) Long Bridge (4 meter) CS 111 Telescope Carriage Tracking 4512-201-06241 CSM Control Grip 4512-201-10971 CSM Tubemount alphadrive 4512-201-10951						
MOUNTING: <u>Ceiling Suspended:</u> Longitudinal Rails suspended from Unistrut P1001 supports spaced 26.5" max. o.c. using Philips proprietary mounting hardware consisting of: (2) – M10-12.9 socket head bolts thru (2) – Philips clamps to Philips Fixing Block. Typical each longitudinal rail at each Unistrut P1001 support						
DIMENSIONS (in.)				LOWEST RESONANT FREQUENCY (Hz.)		
Width	Depth	Height	Weight (lb.)	Transv - Axis	Longit - Axis	Vert-Axis
159.0	31.0	49 – 107	683	---	---	---
ICC-ES AC156 SHAKE TABLE TEST PARAMETERS						CODE: 2016 CBC
S _{DS} (G)	z/h	I _P	A _{FLX-H} (G)	A _{RIG-H} (G)	A _{FLX-V} (G)	A _{RIG-V} (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

UUT1701-4 Ceiling Suspension CSM w/ Comfort Move & Short (2.3m) Bridge						
MANUFACTURER: Philips Medical System DMC GmbH						
IDENTIFICATION: Ceiling Suspension CSM w/ Comfort Move & Long (4m) Bridge 9890-010-87702 CSM Tubemount alphadrive 4512-201-10951						
DESCRIPTION: Component of the CombiDiagnost R90 dRF & DigiDiagnost systems Ceiling Suspension CSM w/ the following: Comfort Move (Motorized vertical and rotational movement) Short Bridge (2.3m) CS 111 Telescope Carriage Tracking 4512-201-06241 CSM Control Grip 4512-201-10971 CSM Tubemount alphadrive 4512-201-10951						
MOUNTING: <u>Ceiling Suspended:</u> Longitudinal Rails suspended from Unistrut P1001 supports spaced 53.5" max. o.c. using Philips proprietary mounting hardware consisting of: (2) – M10-12.9 socket head bolts thru (2) – Philips rail clips to Philips Fixing Block. Typical each longitudinal rail at each of (4) Unistrut P1001 supports.						
DIMENSIONS (in.)				LOWEST RESONANT FREQUENCY (Hz.)		
Width	Depth	Height	Weight (lb.)	Longit -Axis	Transv-Axis	Vert-Axis
92.8	31	49 – 107	683	---	---	---
ICC-ES AC156 SHAKE TABLE TEST PARAMETERS						CODE: 2016 CBC
S _{DS} (G)	z/h	I _p	A _{FLX-H} (G)	A _{RI-G} (G)	A _{FLX-V} (G)	A _{RI-G} (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.						

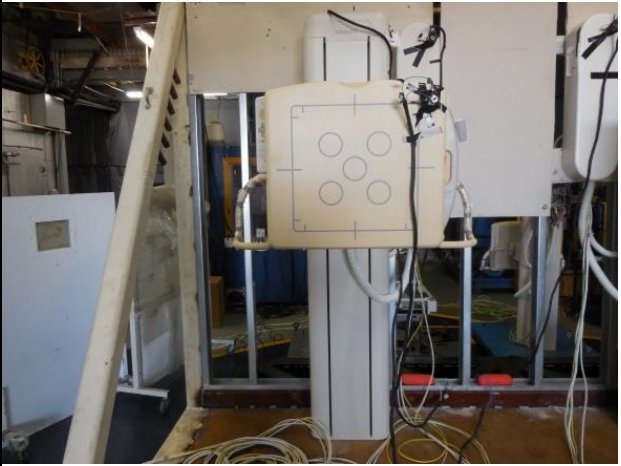
UUT1701- 5 Monitor Suspension (3 monitors) (2BNC 1Eth)						
MANUFACTURER: Ondal & FIMI S.r.l						
IDENTIFICATION: Suspension Assy: 4512-202-03681 Monitor 1: 19LCD-XR 991932252192 Monitor 2: 19LCD-XR 991932252192 Monitor 3: 1XR213L 991932472042						
DESCRIPTION: Monitor Suspension w/ 3 LCD monitors & 2 BNC cables & 1 Ethernet cable.						
MOUNTING: <u>Ceiling Suspended:</u> Longitudinal Rails suspended from Unistrut P1001 supports spaced 53.5" max. o.c. using Philips proprietary mounting hardware consisting of: (2) – M10-12.9 socket head bolts thru (2) – Philips rail clips to Philips Fixing Block. Typical each longitudinal rail at each of (4) Unistrut P1001 supports.						
DIMENSIONS (in.)				LOWEST RESONANT FREQUENCY (Hz.)		
Width	Depth	Height	Weight (lb.)	Longit -Axis	Transv-Axis	Vert-Axis
72.44	33.86	53.14	252	---	---	---
ICC-ES AC156 SHAKE TABLE TEST PARAMETERS						CODE: 2016 CBC
S _{DS} (G)	z/h	I _p	A _{FLX-H} (G)	A _{RI-G} (G)	A _{FLX-V} (G)	A _{RI-G} (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.						


ATTACHMENT 2: TEST SPECIMEN SUMMARY

UUT1701- 6 Monitor Suspension (1 monitor) (1 Eth)						
MANUFACTURER: Ondal & FIMI S.r.l						
IDENTIFICATION: Suspension Assy: 4512-202-03331 Monitor 1: 9919 324 72042						
DESCRIPTION: Component of the CombiDiagnost R90 dRF System Monitor Suspension w/ 1 LCD monitors w Ethernet cable						
MOUNTING: Ceiling Suspended: Longitudinal Rails suspended from Unistrut P1001 supports spaced 53.5"/53.5"/37" using Philips proprietary mounting hardware consisting of: (2) – M10-12.9 socket head bolts thru (2) – Philips rail clips to Philips Fixing Block. Typical each longitudinal rail at each of (4) Unistrut P1001 supports.						
DIMENSIONS (in.)				LOWEST RESONANT FREQUENCY (Hz.)		
Width	Depth	Height	Weight (lb.)	Side-Axis	Front-Axis	Vert-Axis
72.44	33.85	53.14	192	---	---	---
ICC-ES AC156 SHAKE TABLE TEST PARAMETERS						CODE: 2016 CBC
S _{DS} (G)	z/h	I _p	A _{FLEX-H} (G)	A _{RIG-H} (G)	A _{FLEX-V} (G)	A _{RIG-V} (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.						

UUT1701- 7 Vertical Stand VS1 tilting w/ Skyplate Detector (Large)						
MANUFACTURER: Philips Medical System DMC GmbH						
IDENTIFICATION: Vertical Stand VS1 9890-010-83641 Bucky Unit 2 Skyplate 4512-201-10361 Package VS Digital (Motorize Tilt Assy) 4512-201-07221 Skyplate Detector (Large) 9897-010-02681						
DESCRIPTION: Component of the CombiDiagnost R90 dRF System Column motorized 4512-201-02733 Grid Skyplate – Anti Scatter X-Ray Grid 9896-010-63031 Detector loads from left side of bucky SEISMIC KIT: latch to secure bucky tray within bucky.						
MOUNTING: Rigid Wall/Rigid Base Mounted using (4) – 3/8" dia A307 bolts to 16 ga. Steel backing plate at wall. (Torque=17 ft-lb) (3) – 1/2" dia grade 5 bolts to interface plate at floor. (Torque=40 ft-lb)						
DIMENSIONS (in.)				LOWEST RESONANT FREQUENCY (Hz.)		
Width	Depth	Height	Weight (lb.)	Longit -Axis	Transv-Axis	Vert-Axis
23.5	35.5	81.9	562	4.6	11.0	6.7
ICC-ES AC156 SHAKE TABLE TEST PARAMETERS						CODE: 2016 CBC
S _{DS} (G)	z/h	I _p	A _{FLEX-H} (G)	A _{RIG-H} (G)	A _{FLEX-V} (G)	A _{RIG-V} (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.						

ATTACHMENT 2: TEST SPECIMEN SUMMARY

UUT1701- 8 Vertical Stand 2 (VS2) tilting with Skyplate Detector (Large)						
MANUFACTURER: Philips Medical System DMC GmbH						
IDENTIFICATION:		Vertical Stand 2 (VS2) w/ 9897-010-01411 Tilting Module motorized 4598-006-89331 Bucky Unit 2 SkyPlate 4512-201-11921 Skyplate Detector (Large) 9897-010-02681				
DESCRIPTION:						
Component of the CombiDiagnost R90 dRF & DigiDiagnost Systems Column Motorized 4598-006-89311 Grid Skyplate – Anti Scatter X-Ray Grid 9896-010-63031 Detector loads from right side of bucky. SEISMIC KIT: latch to secure bucky tray within bucky. MODIFIED DURING TESTING						
MOUNTING:						
Rigid Wall/Rigid Base Mounted using (4) – 3/8" dia A307 bolts to 16 ga. Steel backing plate at wall. (Torque=17 ft-lb) (3) – 1/2" dia grade 5 bolts to interface plate at floor. (Torque=40 ft-lb)						
DIMENSIONS (in.)				LOWEST RESONANT FREQUENCY (Hz.)		
Width	Depth	Height	Weight (lb.)	Side-Axis	Front-Axis	Vert-Axis
23.5	35.5	81.9	562	4.2	10.2	6.1
ICC-ES AC156 SHAKE TABLE TEST PARAMETERS						CODE: 2016 CBC
S _{Ds} (G)	z/h	I _p	A _{FLEX-H} (G)	A _{RIG-H} (G)	A _{FLEX-V} (G)	A _{RIG-V} (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.						

UUT1701- 9 X-ray high Voltage Generator						
MANUFACTURER: Philips Medical System DMC GmbH						
IDENTIFICATION: 9890-000-70307						
DESCRIPTION:						
Component of the CombiDiagnost R90 dRF System MODEL: Velara GCF 2T						
MOUNTING:						
Wall/Floor Mounted: Upper Connection: (2)-M6 socket head cap screws to Unistrut P1000 For additional information see reference document at end of attachment. Bottom Connection: 3"x3"x1/8" x 0'-10" bent plate (ASTM A36) w/ (4) – 1/4" dia. HWH self-drilling, self-tapping sheet metal screws (2) – 3/8" dia. Grade 5 bolts to interface frame.						
DIMENSIONS (in.)				LOWEST RESONANT FREQUENCY (Hz.)		
Width	Depth	Height	Weight (lb.)	Longit -Axis	Transv-Axis	Vert-Axis
21.7	20.5	77	745.2	10.0	8.4	>50
ICC-ES AC156 SHAKE TABLE TEST PARAMETERS						CODE: 2016 CBC
S _{Ds} (G)	z/h	I _p	A _{FLEX-H} (G)	A _{RIG-H} (G)	A _{FLEX-V} (G)	A _{RIG-V} (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.						

PHILIPS HEALTHCARE 3 X 40E RACK CABINET

DES. **J. ROBERSON**

JOB NO. **13-1701**

DATE **8/7/17**

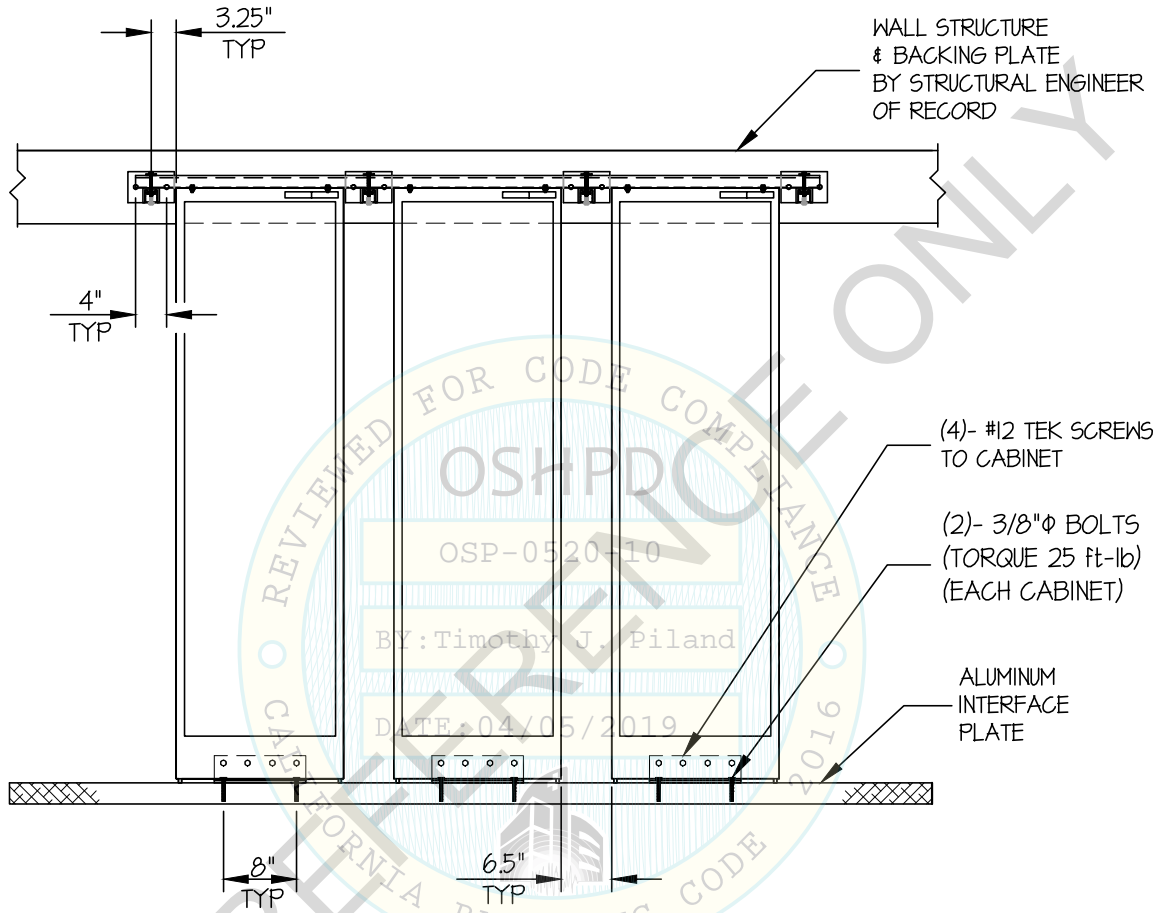
SHEET

1

OF **3** SHEETS

TEST MOUNT DETAILS

ALUMINUM PLATE



ELEVATION

PHILIPS HEALTHCARE

3 X 40E RACK CABINET

DES. J. ROBERSON

JOB NO. 13-1701

DATE 8/7/17

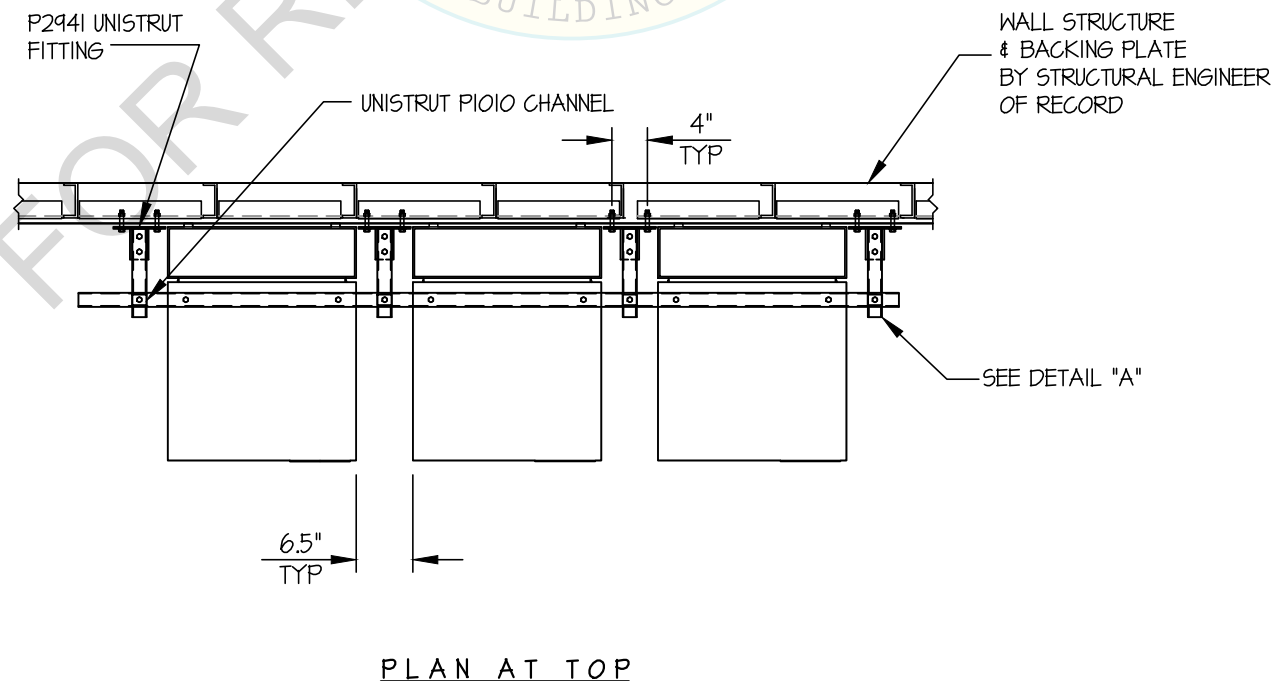
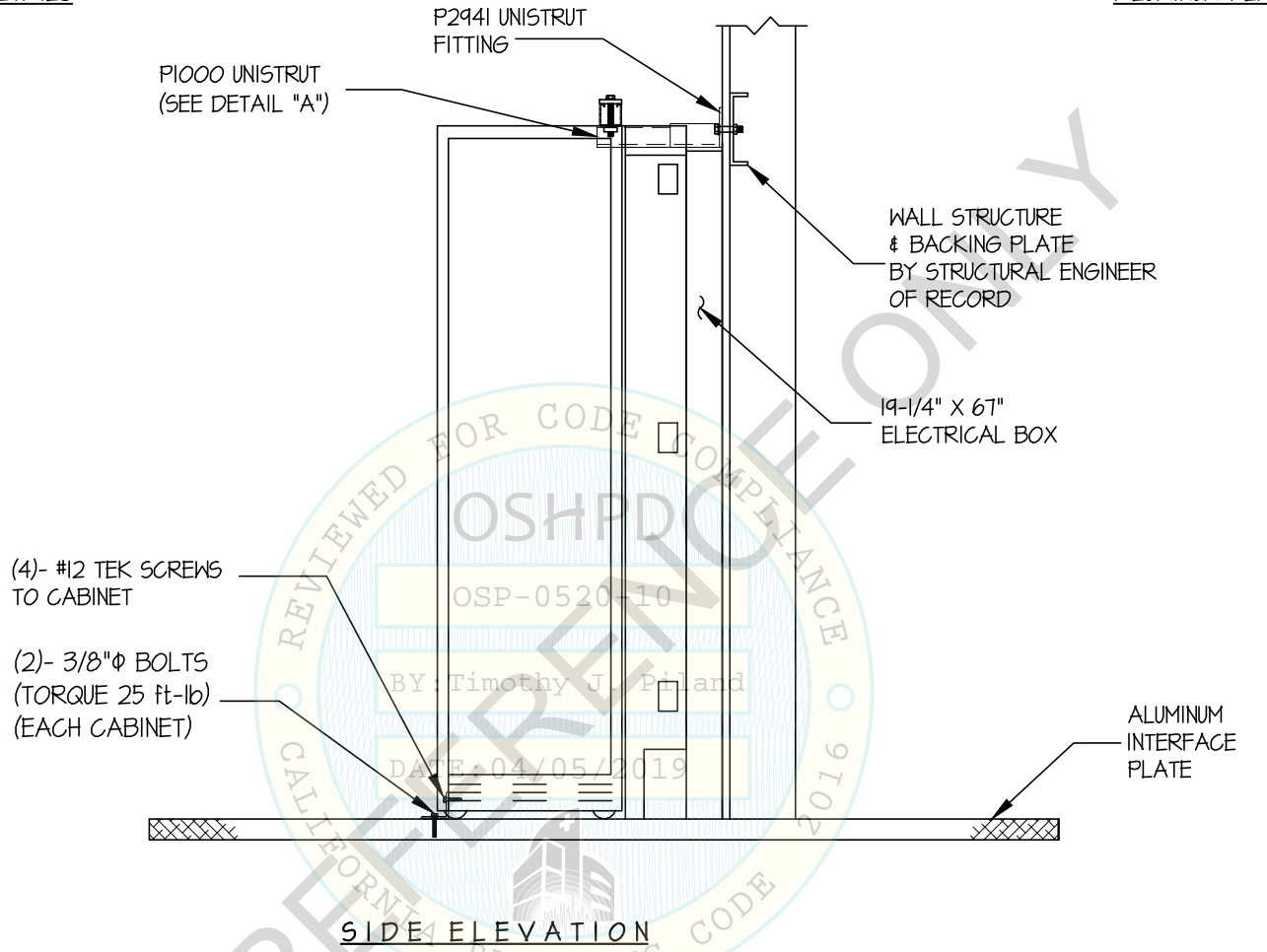
SHEET

2

OF 3 SHEETS

TEST MOUNT DETAILS

ALUMINUM PLATE



PHILIPS HEALTHCARE

DES. J. ROBERSON

SHEET

3

3 X 40E RACK CABINET

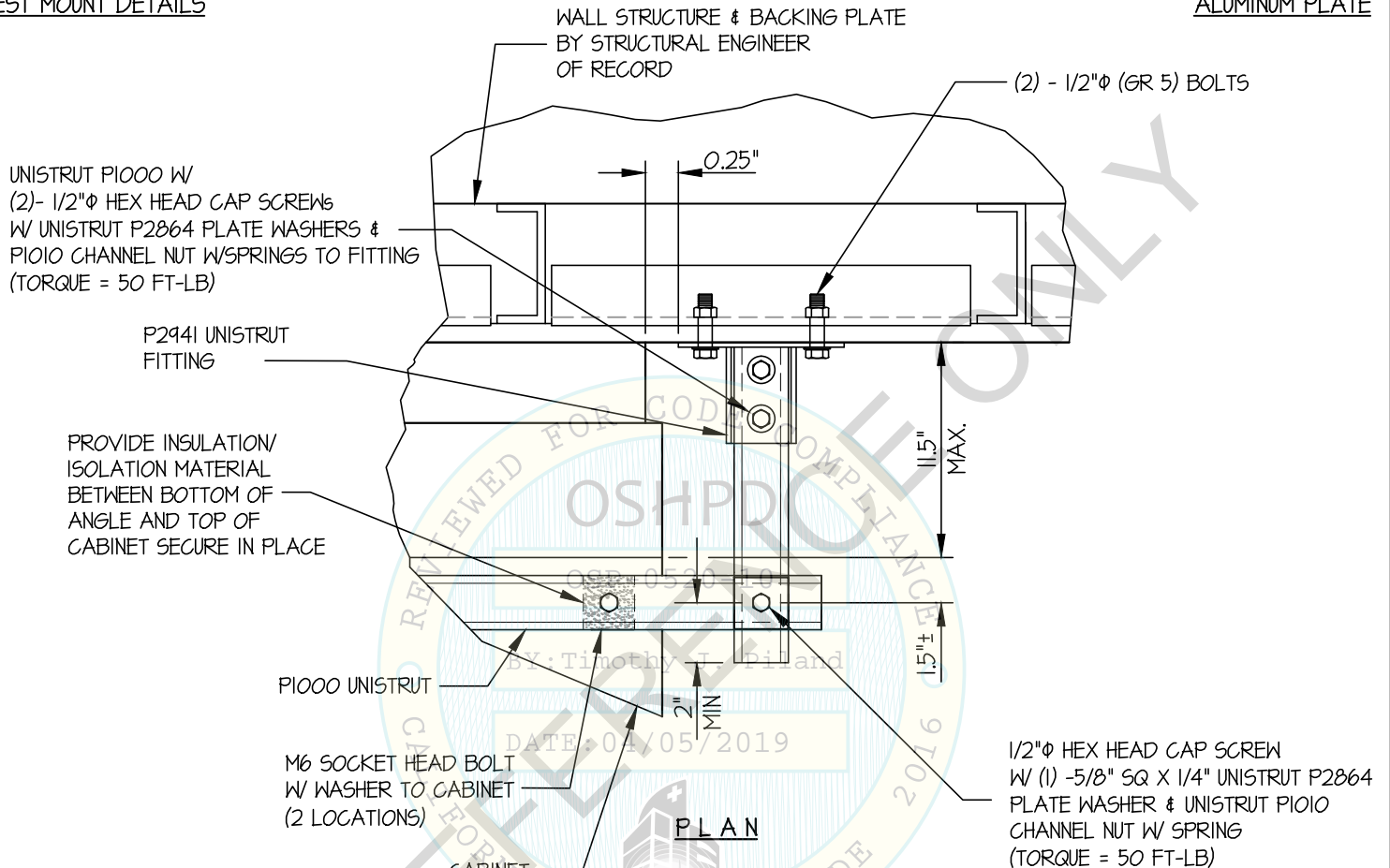
JOB NO. 13-1701

DATE 8/7/17

OF 3 SHEETS

TEST MOUNT DETAILS

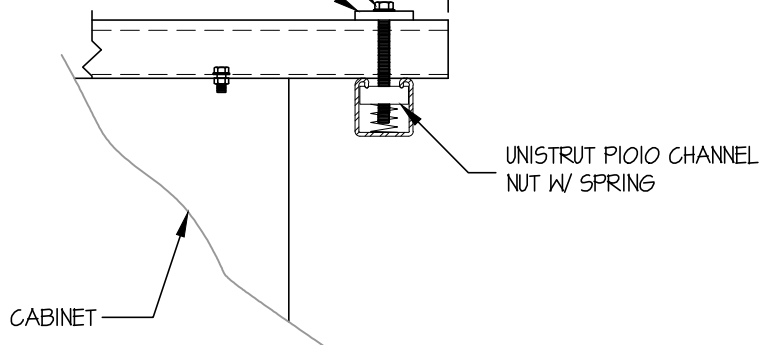
ALUMINUM PLATE



1/2"φ HEX HEAD CAP SCREW
(TORQUE = 50 FT-LB)

1-5/8" SQ X 1/4"
PLATE WASHER
UNISTRUT P2864

2"
MIN



ELEVATION

DETAIL "A"

ATTACHMENT 2: TEST SPECIMEN SUMMARY

UUT1701- 10 M-Cabinet						
MANUFACTURER: Philips Medical System DMC GmbH						
IDENTIFICATION: 4512-202-03621						
DESCRIPTION: Component of the CombiDiagnost R90 dRF System Model: M-Cabinet RF						
MOUNTING: <u>Wall/Floor Mounted:</u> Upper Connection: (2)-M6 socket head cap screws to Unistrut P1000 For additional information see reference document at end of attachment. Bottom Connection: 3"x3"x1/8" x 0'-10" bent plate (ASTM A36) w/ (4) - 1/4" dia. HWH self-drilling, self-tapping sheet metal screws (2) - 3/8" dia. Grade 5 bolts to interface frame.						
DIMENSIONS (in.)				LOWEST RESONANT FREQUENCY (Hz.)		
Width	Depth	Height	Weight (lb.)	Side-Axis	Front-Axis	Vert-Axis
21.7	20.5	77	419.5	10.0	8.4	42.5
ICC-ES AC156 SHAKE TABLE TEST PARAMETERS						CODE: 2016 CBC
S _{DS} (G)	z/h	I _p	A _{FLX-H} (G)	A _{RIG-H} (G)	A _{FLX-V} (G)	A _{RIG-V} (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.						



UUT1701- 11 Geometry Cabinet						
MANUFACTURER: Villa Sistemi Medicali, Italy						
IDENTIFICATION: 4512-202-03591						
DESCRIPTION: Component of the CombiDiagnost R90 dRF System Model: Stand Geo Cabinet assy						
MOUNTING: <u>Wall/Floor Mounted:</u> Upper Connection: (2)-M6 socket head cap screws to Unistrut P1000 For additional information see reference document at end of attachment. Bottom Connection: 3"x3"x1/8" x 0'-10" bent plate (ASTM A36) w/ (4) - 1/4" dia. HWH self-drilling, self-tapping sheet metal screws (2) - 3/8" dia. Grade 5 bolts to interface frame.						
DIMENSIONS (in.)				LOWEST RESONANT FREQUENCY (Hz.)		
Width	Depth	Height	Weight (lb.)	Longit -Axis	Transv-Axis	Vert-Axis
21.7	20.5	77	485	10.0	8.4	17.4
ICC-ES AC156 SHAKE TABLE TEST PARAMETERS						CODE: 2016 CBC
S _{DS} (G)	z/h	I _p	A _{FLX-H} (G)	A _{RIG-H} (G)	A _{FLX-V} (G)	A _{RIG-V} (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.						



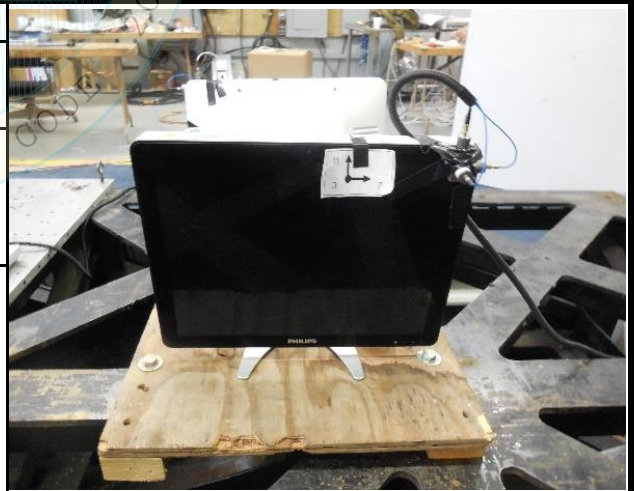
ATTACHMENT 2: TEST SPECIMEN SUMMARY

ATTACHMENT PAGE | 6 OF 9

UUT1701-12 Eleva Workspot						
MANUFACTURER: MSC Technologies Systems						
IDENTIFICATION: 4512-202-03301						
DESCRIPTION: Component of the CombiDiagnost R90 dRF System Eleva Workspot (PC) Model: AWS-DI						
MOUNTING: Rigid Base (Floor) Mounted using a strap assembly at front and rear. Each strap assembly consisting of: 1" wide nylon strap w/ metal cam buckle (50 lb tension / 200 lb WLL) looped through slots in vertical legs of (2) - L2½ x 2½ x ½" x 0'-2" brackets positioned snug against unit. Each bracket attached w/ 3/8" diameter Allen Head cap screw threaded into aluminum plate. (1 set ea. front & rear, 4 bolts total)						
DIMENSIONS (in.)				LOWEST RESONANT FREQUENCY (Hz.)		
Width	Depth	Height	Weight (lb.)	Side-Axis	Front-Axis	Vert-Axis
6 11/16	17	17	33	17	39	11.9
ICC-ES AC156 SHAKE TABLE TEST PARAMETERS						CODE: 2016 CBC
S _{DS} (G)	z/h	I _P	A _{FLEX-H} (G)	A _{RIG-H} (G)	A _{FLEX-V} (G)	A _{RIG-V} (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.						



UUT1701-13 Eleva Monitor (LCD) DATE: 04/05/2019						
MANUFACTURER: Fimi S.r.l. (Italy)						
IDENTIFICATION: 4512-202-03451						
DESCRIPTION: Component of the CombiDiagnost R90 dRF System Eleva monitor for patient admin - 21.3" Touch Fimi S.r.l. Model: MIFC 2121 TPB						
MOUNTING: Rigid Base (Countertop) Mounted w/ (2) - #8 machine screws through ¾" plywood w/ washer & nut on bottom side.						
DIMENSIONS (in.)				LOWEST RESONANT FREQUENCY (Hz.)		
Width	Depth	Height	Weight (lb.)	Longit -Axis	Transv-Axis	Vert-Axis
19 ½	8 7/8	17 ¼	19.4	9.7	9.3	13.4
ICC-ES AC156 SHAKE TABLE TEST PARAMETERS						CODE: 2016 CBC
S _{DS} (G)	z/h	I _P	A _{FLEX-H} (G)	A _{RIG-H} (G)	A _{FLEX-V} (G)	A _{RIG-V} (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

ATTACHMENT PAGE | 7 OF 9

UUT1701-14 RF Viewer Monitor (LCD)						
MANUFACTURER: Fimi S.r.l. (Italy)						
IDENTIFICATION: 4512-202-03461						
DESCRIPTION: Component of the CombiDiagnost R90 dRF System RF-Viewer Monitor – 21.3” Fimi S.r.l. (Italy) Model: MIFC-21 21 TP						
MOUNTING: Rigid Base (Countertop) Mounted w/ (2) - #8 machine screws through 3/4” plywood w/ washer & nut on bottom side.						
DIMENSIONS (in.)				LOWEST RESONANT FREQUENCY (Hz.)		
Width	Depth	Height	Weight (lb.)	Side-Axis	Front-Axis	Vert-Axis
19 1/2	8 7/8	17 1/4	19.4	14.0	9.7	1.08
ICC-ES AC156 SHAKE TABLE TEST PARAMETERS						CODE: 2016 CBC
S _{DS} (G)	z/h	I _p	A _{FLX-H} (G)	A _{RIG-H} (G)	A _{FLX-V} (G)	A _{RIG-V} (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.						



UUT1701-15 Geo Touch Screen Console						
MANUFACTURER: Villa Sistemi Medicali, Italy						
IDENTIFICATION: 4512-134-69651						
DESCRIPTION: Component of the CombiDiagnost R90 dRF System Geo Touch Screen Console						
MOUNTING: Rigid Base (Countertop) Mounted w/ (3) – M5 screws up through bottom of 3/4” plywood into threaded attachment points located in bottom of unit.						
DIMENSIONS (in.)				LOWEST RESONANT FREQUENCY (Hz.)		
Width	Depth	Height	Weight (lb.)	Longit -Axis	Transv-Axis	Vert-Axis
14	14 3/8	4.25	11.5	39.4	42.3	38.8
ICC-ES AC156 SHAKE TABLE TEST PARAMETERS						CODE: 2016 CBC
S _{DS} (G)	z/h	I _p	A _{FLX-H} (G)	A _{RIG-H} (G)	A _{FLX-V} (G)	A _{RIG-V} (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.						



ATTACHMENT 2: TEST SPECIMEN SUMMARY

ATTACHMENT PAGE | 8 OF 9

UUT1701-16 Keyboard (Country Kit AWS USA)						
MANUFACTURER: Cherry						
IDENTIFICATION: 4512-201-04984						
DESCRIPTION: Component of the CombiDiagnost R90 dRF & DigiDiagnost System						
MOUNTING: Rigid Base (Countertop) Mounted (2) – Lines of 1" x 3" 3M Industrial Velcro applied to rear face of Keyboard, spaced 14" apart.						
DIMENSIONS (in.)				LOWEST RESONANT FREQUENCY (Hz.)		
Width	Depth	Height	Weight (lb.)	Side-Axis	Front-Axis	Vert-Axis
18 ½	7 5/8	1 ¾	2	>50	>50	38.5
ICC-ES AC156 SHAKE TABLE TEST PARAMETERS						CODE: 2016 CBC
S _{DS} (G)	z/h	I _P	A _{FLX-H} (G)	A _{RIG-H} (G)	A _{FLX-V} (G)	A _{RIG-V} (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.						




UUT1701-18 USB Infrared Adapter DATE: 04/05/2019						
MANUFACTURER: Philips Medical System DMC GmbH						
IDENTIFICATION: 4512-201-10483						
DESCRIPTION: Component of the CombiDiagnost R90 dRF & DigiDiagnost Systems Infra-red scanner for registering Skyplate digital detectors with the systems.						
MOUNTING: Rigid Base (Countertop) Mounted w/ (2) - #10 self-drilling screws into 3/4" plywood.						
DIMENSIONS (in.)				LOWEST RESONANT FREQUENCY (Hz.)		
Width	Depth	Height	Weight (lb.)	Longit -Axis	Transv-Axis	Vert-Axis
4.5	6	9.75	1	>50	>50	>50
ICC-ES AC156 SHAKE TABLE TEST PARAMETERS						CODE: 2016 CBC
S _{DS} (G)	z/h	I _P	A _{FLX-H} (G)	A _{RIG-H} (G)	A _{FLX-V} (G)	A _{RIG-V} (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.						



ATTACHMENT 2: TEST SPECIMEN SUMMARY

ATTACHMENT PAGE | 9 OF 9

UUT1701- 9 WiFi-Access Point (Cisco AIR-SAP1602I-B-K9)						
MANUFACTURER: Cisco						
IDENTIFICATION: 4512-201-11791						
DESCRIPTION: Component of the CombiDiagnost R90 & DigitalDiagnost system Cisco Aironet 1600 Series 802.11n Dual Band Access Point						
MOUNTING: <u>Rigid Wall Mount:</u> (4) – #8 HWH self-drilling, self-tapping sheet metal screws (Tek) screws to 16 ga. steel stud backing using Cisco mounting plate.						
DIMENSIONS (in.)				LOWEST RESONANT FREQUENCY (Hz.)		
Width	Depth	Height	Weight (lb.)	Side-Axis	Front-Axis	Vert-Axis
8.7	8.7	1.9	2	---	---	---
ICC-ES AC156 SHAKE TABLE TEST PARAMETERS						CODE: 2016 CBC
S _{Ds} (G)	z/h	I _p	A _{FLEX-H} (G)	A _{RIG-H} (G)	A _{FLEX-V} (G)	A _{RIG-V} (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.						

