Test Room ID: R23M

<table>
<thead>
<tr>
<th>Description:</th>
<th>SEMI-ANECHOIC SHIELDED TEST ENCLOSURE</th>
</tr>
</thead>
<tbody>
<tr>
<td>Primary Testing Uses:</td>
<td>MIL-STD, DO-160, CISPR 25, AUTOMOTIVE, CE MARK</td>
</tr>
<tr>
<td>Dimensions:</td>
<td>9.4m x 7.1m x 5.4m (31ft. x 23ft. x 18ft.) [see Figure – 3a below]</td>
</tr>
<tr>
<td></td>
<td>Door Opening: 2.74m x 3.35m (9ft x 11ft)</td>
</tr>
<tr>
<td>Construction:</td>
<td>1 Layer 3oz Copper RF absorber placed on all four walls and the ceiling Continuous Solder for Ground Plane Bonding</td>
</tr>
<tr>
<td>Ground Plane Dimensions:</td>
<td>9.40m x 2.19m x 7.80mm (31ft. x 6ft. x 0.031in.) Usable Floor Ground Plane: 17ft. 9in. x 24ft. [see Figure – 3a below]</td>
</tr>
<tr>
<td>Distance from Cable Tunnel to Front of Ground Plane:</td>
<td>2.0m (79in.)</td>
</tr>
<tr>
<td>Room Filters:</td>
<td>(2) 28VDC, 60A DC Filtered Lines</td>
</tr>
<tr>
<td>Power Availability:</td>
<td>115VAC, 400Hz, 3Phase, 30A Filtered AC Power</td>
</tr>
<tr>
<td></td>
<td>115VAC, 60Hz, 3Phase, 30A Filtered AC Power</td>
</tr>
<tr>
<td></td>
<td>115VAC, 60Hz, 1Phase, 15A Outlets</td>
</tr>
<tr>
<td>Note:</td>
<td>Other power arrangements are available upon request.</td>
</tr>
<tr>
<td>Ventilation:</td>
<td>20 Air changes per hour (3 minutes) 4000cfm MUA Filtered air below ground plane &amp; 4000cfm exhausted air near ceiling. 2 – HVAC feeds (below ground plane &amp; near ceiling) Approximately 1600cfm each</td>
</tr>
</tbody>
</table>
Monitor Room ID: R23L

<table>
<thead>
<tr>
<th>Description:</th>
<th>SHIELDED MONITOR/LOAD ENCLOSURE</th>
</tr>
</thead>
</table>
| Dimensions:        | 3.05m x 2.74m x 3.05m (10ft x 9ft x 10ft)  
                      *Door Opening: 1.83mx 2.44m (6ft x 8ft)*   
                      [see Figure – 3a below] |
| Construction:      | 1 Layer 3oz Copper               
                      Copper Straps for Ground Plane Bonding |
| Ground Plane Dimensions: | 2.44m x 0.76m x 7.8mm (8ft. x 2.5ft. x 0.031in.)   
                      [see Figure – 3a below] |
| Distance from Cable Tunnel to Front of Ground Plane: | 0.78m (30.75in) |
| Power Availability: | AC/DC 30 Amp (4 lines)          
                      115VAC 60Hz 1Phase 15 Amp outlets  
                      480VAC 60Hz 3Phase 30 Amp         
                      *Note: Other power arrangements are available upon request.* |
| General Cabling Considerations: | Please note that the distance from the front edge of the monitor room table and the test room ground plane is **8.5 feet**. Plan cable lengths accordingly.  
                      **Mil Std Tests:**  
                      *Power and interconnect leads need to be 2 meters in length within 10cm of the front of the ground plane.* (Ref 461E section 4.3.8.6.1 & 4.3.8.6.2)  
                      **DO-160 Tests:**  
                      *Power leads need to be 1 meter in length within 10 cm of the front of the ground plane. Interconnect leads need to have 3.3 meters exposed and at least 1 meter within 10 cm of the front of the ground plane.* (Ref DO-160D Section 20.3) |
NOTE: FOR ELITE CUSTOMER USE ONLY. Information listed here is subject to revision without notice. Actual chamber performance will depend on test item and specification requirements. Contact Elite for current test equipment information and test application assistance.

EMI CHAMBER DESCRIPTION

TEST SUITE 23

Figure – 1a: Room 23M

Figure – 1b: Room 23M
Figure – 2a: Room 23L

Figure – 2b: Room 23L
Figure – 3a: Rooms 23M and 23L

ROO**M**s 23M & 23L

Load Room 120" Tall (R23L)

Waveguide Plate #3

72" by 96" Door

4-250Amp Leads to Load Room

Ground Plane 34" High Equipment interface Plate #2 (w/ universal plate inset)

Main Room 216" Tall (R23M)
RF Absorber Lined Chamber

20 Air Changes Per Hour

NOTE: FOR ELITE CUSTOMER USE ONLY. Information listed here is subject to revision without notice. Actual chamber performance will depend on test item and specification requirements. Contact Elite for current test equipment information and test application assistance.
Figure – 3b: Rooms 23M and 23L

ROOMs R23M & R23L

4000 cfm MUA filtered with motorized damper vented under the ground plane.

Removable ground planes

(R23L)
10ft by 9ft by 10ft high

Waveguide Plate #3

(R23M)
31ft by 23ft by 18ft high
RF Absorber Lined Chamber
20 Air Changes Per Hour

9ft high by 11ft wide door opening

4000 cfm exhaust air with motorized damper exhaust on roof.

motorized pressure relief damper interlocked with exhaust

HVAC APRX CFM=1600 cfm

115 Vac
230 Vac

Waveguide Plate #1 (w/ universal plate inset)
EMI CHAMBER DESCRIPTION

NOTE: FOR ELITE CUSTOMER USE ONLY. Information listed here is subject to revision without notice. Actual chamber performance will depend on test item and specification requirements. Contact Elite for current test equipment information and test application assistance.

TEST SUITE 23

Figure – 3c: Rooms 23M and 23L

ROOMs 23M & 23L

Load Room 120" Tall (R23L)

72" by 96" Door

Waveguide Plate #3

4-250Amp Leads to Load Room

Floor Ground Plane
17ft. 9in. By 24ft.
213in. By 288in.

Main Room 216" Tall (R23M)
RF Absorber Lined Chamber

4000 cfm MUA
filtered with motorized damper
vented under the ground plane.

4000 cfm exhaust air with
motorized pressure relief
damper interlocked with
exhaust
to the roof.

288"

20 Air Changes Per Hour

Page 7 of 14
**Figure – 4a:** Waveguide Mounting Plate #1 w/ Universal plate and Two 2 inch copper tubes (between R23M & R23L)

**Figure – 4b:** Waveguide Mounting Plate #1 w/ Universal plate and Two 2 inch copper tubes (between R23M & R23L)
EMI CHAMBER DESCRIPTION

NOTE: FOR ELITE CUSTOMER USE ONLY. Information listed here is subject to revision without notice. Actual chamber performance will depend on test item and specification requirements. Contact Elite for current test equipment information and test application assistance.

TEST SUITE 23

Mounting holes are .25 diameter
All dimensions are in inches

Figure – 5: Waveguide Mounting Plate #1 Dimensions
See Universal Plate Figure 7 for Inner Plate Dimensions

Page 9 of 14
Figure – 6: Equipment Interface Mounting Plate #2 w/ Universal plate
See Universal Plate Figure 7 for Inner Plate Dimensions
Figure – 7: Room 23M Universal Plate Dimensions (Plate #2)
Figure – 8: Room 23M panel below ground plane to 23L under the ground plane. 13 ¾ inch by 11 ½ inch high opening (Plate #3)
**Figure – 9:** Room 23M panel below ground plane to 23L under the ground plane. 13 ¾ inch by 11 ½ inch high opening (Plate #3)
Usable Area 11.5 by 13.75

Top and bottom hole spacing is 3 13/16
Left and right hole spacing is 3 3/16
All holes 3/8 dia. 1/2 from edge
11.5in. By 13.75in. Opening (1¼ border)

**Figure – 10:** Room 23M Plate under Ground plane Dimensions
Plate #3