Washington Laboratories, Ltd.

DO160 Section 20, 21 and 25 Test Report

DEVILBISS HEALTHCARE INC.,
306DS Oxygen Concentrator

WLL REPORT# **9546-01 Rev 0**

August 26, 2008

Prepared for:

DEVILBISS HEALTHCARE INC.,
A DIVISION OF SUNRISE MEDICAL HHG INC.
100 DEVILBISS DRIVE
SOMERSET, PA 15501

Prepared By:

Washington Laboratories, Ltd.
7560 Lindbergh Drive
Gaithersburg, Maryland 20879

Certificates and reports shall not be reproduced except in full, without the written permission of Washington Laboratories, Limited.

3 Test Results

3.1 Radiated Emissions

3.1.1 Requirements

Test Arrangement: Table Top

DO160 SECTION 21 Compliance Limits Category M	
Frequency	**Limits**
100MHz – 108MHz	44.6 – 45.1dBμV/m
108MHz – 152MHz	35 – 37.5dBμV/m
152MHz -960GHz	45.5 – 60.3dBμV/m
960 – 1215MHz	50.3 - 52 dBμV/m
1215 – 1525MHz	62 – 63.5 dBμV/m
1525 – 1680MHz	53.5 – 54 dBμV/m
1680 – 6000MHz	64.2 - 73 dBμV/m

3.1.2 Test Equipment

Asset #	Manufacturer/Model	Description	Cal. Due
00614	WLL - RG 223	CABLE, COAXIAL, BNC, 18-M	01/03/2009
00437	WLL, RG-223	CABLE, COAXIAL, BNC, 7-M	01/03/2009
00431	ARA, DRG-2020/A	ANTENNA, DRG, 200MHZ-2GHZ	04/20/2009
00026	EMCO, 3110B	ANTENNA, BICONICAL	02/05/2010
00558	HP, 8447D	AMPLIFIER	03/28/2009
00066	HP, 8449B	PRE-AMPLIFIER, RF. 1-26.5GHZ	08/02/2008
00618	HP 8563A	ANALYZER, SPECTRUM	03/07/2009
00004	ARA, DRG-118/A	ANTENNA, DRG, 1-18GHZ	02/02/2009
00630	MEGAPHASE - F230-S1S1-226	DC- 18GHZ SMA 226CM	07/02/2008

 © 2008 Washington Laboratories, Ltd.

3.1.3 Test Procedure

The EUT was arranged in an Anechoic Chamber as depicted in Figure 21-9 of DO-160F. While running at a 3LPM rate, the unit was scanned from 100MHz to 6GHz with the antennas in a Vertical and Horizontal orientation. Data was collected via computer program and plotted against the limits for Category M equipment.

3.1.4 Test Data

The EUT complied with the Class M Radiated Emissions requirements. Figure 1 through Figure 4 provides the test results for RF emissions (Vertical and Horizontal) from 100MHz to 6GHz. Photograph 1 shows the Radiated Emissions test setup.

 © 2008 Washington Laboratories, Ltd.