



ARMSTRONG AEROSPACE

Proprietary Notice
This document and the information disclosed herein are proprietary data of Armstrong Aerospace, Inc. Neither this document nor the information contained within shall be used, reproduced, or disclosed to others without the written authorization of Armstrong Aerospace, Inc.

**Ground EMI Test Procedure
Wireless 802.11a/b/g/n Devices
Boeing 777-300/-300ER Series Aircraft**
www.armstrongaerospace.com

DOCUMENT NO.: JC241-9081-02
REV.: -
DATE: AUG 24, 2011



GROUND EMI TEST PROCEDURE

Wireless 802.11a/b/g/n Devices
Boeing 777-300/-300ER Aircraft

Ref. : JC241-9081-02
Rev. : -
Date : AUG 24, 2011
Page : 2/40

TABLE OF REVISIONS

REVISION	DATE	REASON FOR REVISION	ISSUED BY	APPROVED BY
-	08/24/11	Initial Release	C.Porter	R. Beech



GROUND EMI TEST PROCEDURE

Wireless 802.11a/b/g/n Devices
Boeing 777-300/-300ER Aircraft

Ref.	:	JC241-9081-02
Rev.	:	-
Date	:	AUG 24, 2011
Page	:	3/40

TABLE OF CONTENTS

TABLE OF REVISIONS	2
TABLE OF CONTENTS	3
1. PURPOSE	4
1.1. SCOPE	4
2. REFERENCE DOCUMENTS	4
3. TEST LOCATION	4
4. CONFORMITY INSPECTION	4
5. SITE REQUIREMENTS AND CONDITIONS	4
6. RESOURCES REQUIRED	5
7. PREREQUISITE TASKS.....	6
8. AIRPLANE SYSTEMS CONFIGURATION	6
9. TEST WITNESSING & PERFORMANCE OF TESTS.....	6
10. EQUIPMENT UNDER TEST	7
11. OPERATION OF TEST AMPLIFIERS.....	7
12. PROGRAMMING WAVEFORM INTO VECTOR SIGNAL GENERATOR	8
13. DIRECTED EXPOSURE TEST – EQUIPMENT UNDER TEST (EUT)	8
14. CONCLUSION	40

1. PURPOSE

The purpose of the test is to demonstrate that aircraft systems installed on a Boeing 777-300/300ER series aircraft are not susceptible to IEEE 802.11a/b/g/n wireless devices being operated within the airframe and provide an accurate written record of the tests performed.

1.1. SCOPE

The scope of this document is to present a means of compliance with Federal Aviation Regulations 25.1309(a). This Electromagnetic Interference / Electromagnetic Compatibility (EMI / EMC) test procedure is provided to establish that 802.11a/b/g/n devices do not adversely affect the operation and integrity of other systems on the aircraft.

2. REFERENCE DOCUMENTS

- Armstrong Aerospace document JC241-9081-01, Procedure, Ground EMI Setup/Calibration, Wireless 802.11a/b/g/n Devices, Boeing 777-300/300ER
- Armstrong Aerospace document JC241-9081-03, Diagram, Ground EMI Setup/Calibration, Wireless 802.11a/b/g/n Devices, Boeing 777-300/300ER
- Armstrong Aerospace document JC241-9081-04, Diagram, Ground EMI Test, Wireless 802.11a/b/g/n Devices, Boeing 767-300/300ER
- Armstrong Aerospace document JC241-9081-05, Aircraft Equipment Record, Ground EMC Test, Wireless 802.11a/b/g/n Devices, Boeing 777-300/300ER
- Armstrong Aerospace document PL44-9081-10, Parts List, Ground EMI Test, Procedure, Wireless 802.11a/b/g/n Devices, Boeing 777-300/300ER

3. TEST LOCATION

This EMI/EMC test will be performed at an approved maintenance facility.

4. CONFORMITY INSPECTION

Conformity is not required for execution of this test.

5. SITE REQUIREMENTS AND CONDITIONS

- Since communication and navigation systems are being evaluated, the airplane will be required to be outside of the hanger and at least 150 feet from large metallic structures.
- Electrical and hydraulic power must be available throughout the test. Airplane power can be from any source (engine, APU, or external) during most of the test. In addition, APU and main engines will be run for evaluation of engine controls.
- Three 115VAC 60 Hz 15A sources of power are required to operate the test equipment.
- The total airplane test time is estimated to be approximately 8 to 12 hours.
- The tests may be performed in any order.

Caution: Exposure to Radio Frequency Radiation!

- Since the RF radiated field can be hazardous to personnel, the admittance of people in the vicinity of the tests should be minimized. Observers and visitors shall only be allowed onboard the aircraft in company of the test personnel. In addition, a flashing red light will be located close to the aircraft entrance to inform personnel of the transmitting state.
- While the radiating antenna is transmitting, a minimum distance for personnel shall be established. Refer to JC241-9081-01 Procedure, Ground EMI Setup/Calibration, Wireless 802.11a/b/g/n Devices, Boeing 777-300/300ER for guidance on safe exposure limits.

6. RESOURCES REQUIRED

- Test Sets for ATC, TCAS, VOR/ILS, Marker Beacon, DME, and SELCAL. Note: Where possible, local off-the-air signals will be used when testing these systems. The test sets will be used only in the absence of valid local signals.
- Flashing red light
- Personal communication devices for communication between test personnel, FAA representative, mechanics, etc.
- Tape measure (16' or longer)
- Test equipment specified in Test Equipment Parts List PL44-8092-10.
- Aircraft maintenance personnel with the authority and knowledge to perform the aircraft system checks from the cockpit and Cabin Crew Control Stations.
- Aircraft maintenance personnel with the knowledge to operate the In-Flight Entertainment Equipment (IFE) including knowledge of crew passwords and login information.
- Exterior observers to monitor control surfaces for uncommanded movements.
- Armstrong Aerospace personnel to set up and operate the test equipment, and coordinate the test effort.
- Digital camera to document test antenna positions and test equipment setup.

7. PREREQUISITE TASKS

- The procedures should not be performed in this document assume that all aircraft systems to be evaluated must be functional prior to the start of the test to establish test integrity. Strongly suggest better wording in airline vocabulary here - Any Logbook discrepancies for any of the targeted systems must be rectified prior to testing." or similar
- All test personal shall have read and be familiar with JC241-9081-01 Procedure, Ground EMI Setup/Calibration and JC241-9081-03 Diagram, Ground EMI Setup/Calibration. Calibration of test equipment to generate the desired electrical field strength is covered in detail in those documents, and must be performed prior to the start of this test.
- Record the airplane system (major component) part numbers and manufacturer information for all airplane systems being evaluated in Armstrong Aerospace document JC241-9081-05, Aircraft Equipment Record, Ground EMC Test, Wireless 802.11a/b/g/n Devices, Boeing 777-300/300ER. This record establishes the airplane configuration at the time of test and the results of this test, in whole or in part, which may be applicable for similarity considerations for follow-on installations on other airplanes.

8. AIRPLANE SYSTEMS CONFIGURATION

As much as practically possible while allowing for personnel access and test cable routing, doors and hatches should be closed. All systems that can be safely operated on the ground should be switched on and set to valid modes. Select all navigation and communication systems on and receiving valid but minimal signals when test sets are available. Operate the navigation and communications equipment on at least one low, high and mid-band frequency. Record all frequencies used. Select ADIs, HSIs, and compass on. Select autopilot and flight director on and set to a mode suitable to display commands and fail flags out of view. Check that engine instruments, radio altimeter, stall warning, and flap indications are powered. Tune all radio receivers to the test set frequency or to a distant active channel. Check the magnetic compass is not displaying any erroneous heading at least four times throughout the test.

9. TEST WITNESSING & PERFORMANCE OF TESTS

Individuals witnessing the tests (FAA representative or DER) shall verify antenna position placement prior to performance of tests. The test witness shall be positioned such that observation of normal operation of the system/equipment under test is evident. Testing personnel shall communicate any observations, such as fault displays, to the attention of the test witness.

10. EQUIPMENT UNDER TEST

All aircraft systems regarded as “Critical”, “Essential”, and “Non-Essential but Required for Dispatch” will be evaluated for interference in the presence of the EMC test signal. No effect of T-PED radiators may be allowed to aircraft equipment in these categories.

In the “Non-Essential” category, aircraft equipment that is not required for dispatch, but that might have a susceptibility to transmissions at the test frequencies will be tested. Equipment in this category includes primarily the IFE (in-flight entertainment) system head-end, distribution, and display units (if equipped). Any effect on devices in this category will be recorded and reported to the airline for additional action. Devices falling within this category will be clearly labeled “Non-Essential” on the aircraft-specific results report form.

11. OPERATION OF TEST AMPLIFIERS

Operator control of the 2.4 GHz and 5.8 GHz amplifiers is identical, and simple. The only control on the Amplifier Enclosure is a lighted ON-OFF switch. The amplifiers contain an integral fan within the enclosure that blows air across the power supply and the cooling fins of the power amplifier. If the fan does not run when the power cord of the enclosure is plugged in, unplug the power cord and check the fuse in the holder mounted adjacent to the lighted ON-OFF switch. Replace if necessary, after determining cause of failure. Do not operate power amplifier if enclosure fan is inoperative. CAUTION: If amplifier is operated without cooling airflow, POWER AMPLIFIER FAILURE WILL RESULT.

If the amplifier has been running for several minutes or longer, allow at least 2 minutes for the fan to run (to cool the amplifier) after the ON-OFF switch has been turned OFF, before disconnecting the Amplifier Enclosure power cord from the 115 VAC source. Avoid plugging in or disconnecting the power cord with the enclosure switch in the ON position.

When ready to commence testing, check that RF output of the SigGen is turned OFF, then turn Amplifier Enclosure(s) switch(es) ON. Switch should light, indicating that power is being supplied to amplifier. Allow several minutes after starting for the amplifier(s) to reach a normal operating temperature. Remove personnel from vicinity of antennae before turning SigGen RF output ON again. When the particular test is finished, turn SigGen RF output OFF. Depending on the wait time before starting the next test, the Amplifier Enclosure ON-OFF switch may be either turned OFF, or left ON. So long as the SigGen RF output is turned OFF, there will be no RF emission from the antennae, even with DC power being supplied to the amplifier.

12. PROGRAMMING WAVEFORM INTO VECTOR SIGNAL GENERATOR

Waveform: Based on both 802.11b 11 Mbps (DSSS) and 802.11a/g 54 Mbps (OFDM) beacon packets

Packet Sequence:

(A) A sequence of 49 802.11b beacon packets. This sequence shall be followed by a 'blank' time interval of 1 packet. This waveform shall have a duty cycle of 98%.

(B) A sequence of 49 802.11a/g beacon packets. This sequence shall be followed by a 'blank' time interval of 1 packet. This waveform shall have a duty cycle of 98%.

The overall waveform shall consist of alternating sequences A and B (A-B-A-.... etc.)

Frequency Sweep - 802.11b/g: start frequency = 2.397 GHz, stop frequency = 2.494 GHz

Number of frequency steps: 14 channels + 6 out-of-band channels = 20 steps

Frequency sweep time: 1 msec per step (20 msec per sweep)

Frequency Sweep - 802.11a: start frequency = 5.160 GHz, stop frequency = 5.825 GHz

Number of frequency steps: 12 channels + 24 out-of-band channels = 36 steps

Frequency sweep time: 1 msec per step (36 msec per sweep)

Output level: calibrated for the test; resulting level is dependent on PA gain, Radiating Antenna gain, and coax losses

Amplitude Setting: ALC is enabled, thereby compensating for effects of low duty cycle to net output power

13. DIRECTED EXPOSURE TEST – EQUIPMENT UNDER TEST (EUT)

Reference Armstrong Aerospace document JC241-9081-04 Diagram, Ground EMI, CWLAN 802.11a/b/g/n, for test antenna positions. The following paragraphs identify the test location, radiating antenna positions and aircraft system / equipment to be evaluated at the location. At these positions, the equipment will be exercised and monitored per the airplane maintenance manual's operational test procedures (control surfaces shall also be monitored by ground personnel for any uncommanded movement).



GROUND EMI TEST PROCEDURE

Wireless 802.11a/b/g/n Devices
Boeing 777-300/-300ER Aircraft

Ref. : JC241-9081-02
Rev. : -
Date : AUG 24, 2011
Page : 9/40

13.1. ANTENNA POSITION #1 – FLIGHT DECK

Position test antenna(s) 40" from main instrument panel (Reference JC241-9081-04 Test Procedure Diagram). Exercise and monitor the following systems. Reference the aircraft maintenance manual (AMM), if necessary, for guidance on operational test procedures.

Note: It may not be possible to expose all flight deck instruments with a single antenna position. Re-aim the antenna as required during the procedure. Exercise and monitor the following systems per the airplane maintenance manual operational test procedures:

Antenna Position #1, Flight Deck Systems / Equipment	
System	Test Record
Lighting / Cockpit, Cabin, and EEL	13.1.1
Autopilot Interface	13.1.2
EFIS (Electronic Flight Instrument System)	13.1.3
MCDU (Multifunction Control Display Units)	13.1.4
RMP (Radio Management Panels)	13.1.5
ACP (Audio Control Panels)	13.1.6
Standby Instruments	13.1.7
Clock and Magnetic Compass	13.1.8
Additional Equipment	13.1.9

13.1.1. EMERGENCY EXIT LIGHTING (EEL), CABIN AND COCKPIT LIGHTING

Equipment To Be Evaluated	Test Result?	Effect?	SigGen Output Level(s) at Effect Threshold?
EEL	Pass Fail	Yes No	
Cockpit Lighting	Pass Fail	Yes No	
Cabin Lighting	Pass Fail	Yes No	

Observation / Comments: _____



GROUND EMI TEST PROCEDURE

Wireless 802.11a/b/g/n Devices
Boeing 777-300/-300ER Aircraft

Ref. : JC241-9081-02
Rev. : -
Date : AUG 24, 2011
Page : 10/40

13.1.2. AUTOPILOT INTERFACE

Equipment To Be Evaluated	Test Result?	Effect?	SigGen Output Level(s) at Effect Threshold?
Autopilot Interface	Pass Fail	Yes No	

Observation / Comments: _____

13.1.3. ELECTRONIC FLIGHT INSTRUMENTATION SYSTEM (EFIS)

Equipment To Be Evaluated	Test Result?	Effect?	SigGen Output Level(s) at Effect Threshold?
EFIS	Pass Fail	Yes No	

Observation / Comments: _____

13.1.4. MULTIFUNCTION CONTROL DISPLAY UNITS (MCDUS)

Equipment To Be Evaluated	Test Result?	Effect?	SigGen Output Level(s) at Effect Threshold?
MCDUs	Pass Fail	Yes No	

Observation / Comments: _____



GROUND EMI TEST PROCEDURE

Wireless 802.11a/b/g/n Devices
Boeing 777-300/-300ER Aircraft

Ref. : JC241-9081-02
Rev. : -
Date : AUG 24, 2011
Page : 11/40

13.1.5. RADIO MANAGEMENT PANELS (RMPS)

Equipment To Be Evaluated	Test Result?	Effect?	SigGen Output Level(s) at Effect Threshold?
RMPS	Pass Fail	Yes No	

Observation / Comments: _____

13.1.6. AUDIO CONTROL PANELS (ACPS)

Equipment To Be Evaluated	Test Result?	Effect?	SigGen Output Level(s) at Effect Threshold?
ACPs	Pass Fail	Yes No	

Observation / Comments: _____

13.1.7. STANDBY INSTRUMENTS

Equipment To Be Evaluated	Test Result?	Effect?	SigGen Output Level(s) at Effect Threshold?
Standby Instruments	Pass Fail	Yes No	

Observation / Comments: _____



GROUND EMI TEST PROCEDURE

Wireless 802.11a/b/g/n Devices
Boeing 777-300/-300ER Aircraft

Ref. : JC241-9081-02
Rev. : -
Date : AUG 24, 2011
Page : 12/40

13.1.8. CLOCK AND MAGNETIC COMPASS

Equipment To Be Evaluated	Test Result?	Effect?	SigGen Output Level(s) at Effect Threshold?
Clock	Pass Fail	Yes No	
Magnetic Compass	Pass Fail	Yes No	

Observation / Comments: _____

13.1.9. ADDITIONAL EQUIPMENT

Equipment To Be Evaluated	Test Result?	Effect?	SigGen Output Level(s) at Effect Threshold?
	Pass Fail	Yes No	

Observation / Comments: _____

13.2. ANTENNA POSITION #2 – E1 EQUIPMENT RACK

Position test antenna(s) a maximum of 40” FWD of rack face (reference JC241-9081-04 Test Procedure Diagram). Exercise and monitor the following systems. Reference the aircraft maintenance manual (AMM), if necessary, for guidance on operational test procedures.

Antenna Position #2, E1 Equipment Rack Systems / Equipment	
System	Test Record
A/C Power Generation / TRANSFORMER RECTIFIER UNIT LEFT, GENERATOR CONTROL UNIT, BUS POWER CONTROL UNIT, FCDC BATTERY LEFT, FLAP/SLAT ELECTRONICS UNIT 1	13.2.1
Flight Control Systems / ACTUATOR CTRL ELEC LEFT 2, PRIMARY FLIGHT COMPUTER LEFT, FLAP/SLAT ELECTRONICS UNIT 1	13.2.2
Navigation / AUTO DIR FINDER LEFT, INST. LAND SYSTEM RCVR-L, DIST MEAS EQUIPMENT INTERROGATOR-L, TRAFFIC ALLER & COLLISION AVOIDANCE, VOR RCVR MARKER BEACON-L, AIR TRAFFIC CONTROL TRANS-L, MULTI-MODE RCRV (MMR), GRD PROX WARNING COMPUTER,	13.2.3
Communications / SELCAL DECODER UNIT, VHF COMM UNIT-C, VHF COMM UNIT-L, AUDIO MGMT UNIT, PASS ADDRESS CABIN INTERPHONE, CABIN SYSTEM MGMT UNIT (CSMU)	13.2.4
Air Conditioning and Pressurization / CABIN TEMP CONTROL UNIT LEFT	13.2.5
Auto Flight / AUTOPILOT FLIGHT DIRECTOR COMPUTER-L	13.2.6
Information Systems / ELEC FLIGHT BAG CAPT.	13.2.7
Engine Indicating / ENGINE VIBRATION MONITOR- L	13.2.8
Landing Gear / PROXIMITY SENSOR ELECTRONICS UNIT 1	13.2.9
Indicating Recording System / WARNING ELECTRONIC UNIT, TAXI CAMERA INTERFACE UNIT	13.2.10
De-Icing / WINDOW HEAT & CONTROL UNIT L FWD & R SIDE	13.2.11
Engine- Fuel and Control / ENGINE DATA IFU	13.2.12
Pneumatics / AIR SUPPLY CABIN PRESS CTRL	13.2.13



GROUND EMI TEST PROCEDURE

Wireless 802.11a/b/g/n Devices
Boeing 777-300/-300ER Aircraft

Ref. : JC241-9081-02
Rev. : -
Date : AUG 24, 2011
Page : 14/40

13.2.1. A/C POWER GENERATION

Test Type	Test Result?	Effect?	Distance (inches) Antenna - EUT	SigGen Output Level(s) at Effect Threshold?
Directed Test - A/C Power Generation / TRANSFORMER RECTIFIER UNIT LEFT, GENERATOR CONTROL UNIT, BUS POWER CONTROL UNIT, FCDC BATTERY LEFT, FLAP/SLAT ELECTRONICS UNIT 1	Pass Fail	Yes No		
Cabin Test	Pass Fail	Yes No	N/A	

Observation / Comments: _____

13.2.2. FLIGHT CONTROL SYSTEMS

Test Type	Test Result?	Effect?	Distance (inches) Antenna - EUT	SigGen Output Level(s) at Effect Threshold?
Directed Test - Flight Control Systems / ACTUATOR CTRL ELEC LEFT 2, PRIMARY FLIGHT COMPUTER LEFT, FLAP/SLAT ELECTRONICS UNIT 1	Pass Fail	Yes No		
Cabin Test	Pass Fail	Yes No	N/A	

Observation / Comments: _____



GROUND EMI TEST PROCEDURE

Wireless 802.11a/b/g/n Devices
Boeing 777-300/-300ER Aircraft

Ref. : JC241-9081-02
Rev. : -
Date : AUG 24, 2011
Page : 15/40

13.2.3. COMMUNICATIONS

Test Type	Test Result?	Effect?	Distance (inches) Antenna - EUT	SigGen Output Level(s) at Effect Threshold?
Directed Test - Communications / SELCAL DECODER UNIT, VHF COMM UNIT-C, VHF COMM UNIT-L, AUDIO MGMT UNIT, PASS ADDRESS CABIN INTERPHONE, CABIN SYSTEM MGMT UNIT (CSMU)	Pass Fail	Yes No		
Cabin Test	Pass Fail	Yes No	N/A	

Observation / Comments: _____

13.2.4. AIR CONDITIONING AND PRESSURIZATION

Test Type	Test Result?	Effect?	Distance (inches) Antenna - EUT	SigGen Output Level(s) at Effect Threshold?
Directed Test - Air Conditioning and Pressurization / CABIN TEMP CONTROL UNIT LEFT	Pass Fail	Yes No		
Cabin Test	Pass Fail	Yes No	N/A	

Observation / Comments: _____



GROUND EMI TEST PROCEDURE

Wireless 802.11a/b/g/n Devices
Boeing 777-300/-300ER Aircraft

Ref. : JC241-9081-02
Rev. : -
Date : AUG 24, 2011
Page : 16/40

13.2.5. AUTO FLIGHT

Test Type	Test Result?	Effect?	Distance (inches) Antenna - EUT	SigGen Output Level(s) at Effect Threshold?
Directed Test - Auto Flight / AUTOPILOT FLIGHT DIRECTOR COMPUTER-L	Pass Fail	Yes No		
Cabin Test	Pass Fail	Yes No	N/A	

Observation / Comments: _____

13.2.6. INFORMATION SYSTEMS

Test Type	Test Result?	Effect?	Distance (inches) Antenna - EUT	SigGen Output Level(s) at Effect Threshold?
Directed Test - Information Systems / ELEC FLIGHT BAG CAPT.	Pass Fail	Yes No		
Cabin Test	Pass Fail	Yes No	N/A	

Observation / Comments: _____



GROUND EMI TEST PROCEDURE

Wireless 802.11a/b/g/n Devices
Boeing 777-300/-300ER Aircraft

Ref. : JC241-9081-02
Rev. : -
Date : AUG 24, 2011
Page : 17/40

13.2.7. ENGINE INDICATING

Test Type	Test Result?	Effect?	Distance (inches) Antenna - EUT	SigGen Output Level(s) at Effect Threshold?
Directed Test - Engine Indicating / ENGINE VIBRATION MONITOR- L	Pass Fail	Yes No		
Cabin Test	Pass Fail	Yes No	N/A	

Observation / Comments: _____

13.2.8. LANDING GEAR

Test Type	Test Result?	Effect?	Distance (inches) Antenna - EUT	SigGen Output Level(s) at Effect Threshold?
Directed Test- Landing Gear/ PROXIMITY SENSOR ELECTRONICS UNIT 1	Pass Fail	Yes No		
Cabin Test	Pass Fail	Yes No	N/A	

Observation / Comments: _____



GROUND EMI TEST PROCEDURE

Wireless 802.11a/b/g/n Devices
Boeing 777-300/-300ER Aircraft

Ref. : JC241-9081-02
Rev. : -
Date : AUG 24, 2011
Page : 18/40

13.2.9. INDICATING RECORDING SYSTEM

Test Type	Test Result?	Effect?	Distance (inches) Antenna - EUT	SigGen Output Level(s) at Effect Threshold?
Directed Test- Indicating Recording System / WARNING ELECTRONIC UNIT, TAXI CAMERA INTERFACE UNIT	Pass Fail	Yes No		
Cabin Test	Pass Fail	Yes No	N/A	

Observation / Comments: _____

13.2.10. DE-ICING

Test Type	Test Result?	Effect?	Distance (inches) Antenna - EUT	SigGen Output Level(s) at Effect Threshold?
Directed Test- De-Icing / WINDOW HEAT & CONTROL UNIT L FWD & R SIDE	Pass Fail	Yes No		
Cabin Test	Pass Fail	Yes No	N/A	

Observation / Comments: _____

13.2.11. ENGINE- FUEL AND CONTROL

Test Type	Test Result?	Effect?	Distance (inches) Antenna - EUT	SigGen Output Level(s) at Effect Threshold?
Directed Test- Engine-Fuel and Control / ENGINE DATA IFU	Pass Fail	Yes No		



GROUND EMI TEST PROCEDURE

Wireless 802.11a/b/g/n Devices
Boeing 777-300/-300ER Aircraft

Ref. : JC241-9081-02
Rev. : -
Date : AUG 24, 2011
Page : 19/40

Test Type	Test Result?	Effect?	Distance (inches) Antenna - EUT	SigGen Output Level(s) at Effect Threshold?
Cabin Test	Pass Fail	Yes No	N/A	

Observation / Comments: _____

13.2.12. PNEUMATICS

Test Type	Test Result?	Effect?	Distance (inches) Antenna - EUT	SigGen Output Level(s) at Effect Threshold?
Directed Test- Pneumatics / AIR SUPPLY CABIN PRESS CTRL	Pass Fail	Yes No		
Cabin Test	Pass Fail	Yes No	N/A	

Observation / Comments: _____



GROUND EMI TEST PROCEDURE

Wireless 802.11a/b/g/n Devices
Boeing 777-300/-300ER Aircraft

Ref. : JC241-9081-02
Rev. : -
Date : AUG 24, 2011
Page : 20/40

13.3. ANTENNA POSITION #3 – E2 EQUIPMENT RACK

Position test antenna(s) a maximum of 40" FWD of rack face (reference JC241-9081-04 Test Procedure Diagram). Exercise and monitor the following systems. Reference the aircraft maintenance manual (AMM), if necessary, for guidance on operational test procedures.

Antenna Position #3, E2 Equipment Rack Systems / Equipment	
System	Test Record
A/C Power Generation / GENERATOR CONTROL UNIT RIGHT, TRANSFORMER RECTIFIER UNIT RIGHT, APU GENERATOR CONTROL UNIT, FCDC BATTERY CENTER, FLIGHT CONTROL POWER SUPPLY ASSEMBLY CENTER	13.3.1
Flight Control Systems / ACTUATOR CTRL ELEC CENTER, PRIMARY FLIGHT COMPUTER CENTER	13.3.2
Indicating / Recording System / RIGHT AIRCRAFT INFORMATION MANAGEMENT SYSTEM, QUICK ACCESS RECORDER	13.3.3
Navigation / DIST MEAS EQUIPMENT INTERROGATOR-R, AIR TRAFFIC CONTROL TRANS-R, FOR RCVR MARKER BEACON-R, MULTI-MODE RCVR-R (MMR), AUTO DIR FINDER-R, SECONDARY ALTITUDE AIR DATA REF UNIT	13.3.4
Communications / VHF COMM UNIT-R	13.3.5
Pneumatic / AIR SUPPLY CABIN PRESS CTRL	13.3.6
Engine Indicating / ENGINE VIBRATION MONITOR-R	13.3.7
Auto Flight / AUTO PILOT FLIGHT DIRECTOR COMPUTER-R (AFDC)	13.3.8
De-Icing / WINDOW HEAT & CTRL UNIT R FWD & L SIDE	13.3.9



GROUND EMI TEST PROCEDURE

Wireless 802.11a/b/g/n Devices
Boeing 777-300/-300ER Aircraft

Ref. : JC241-9081-02
Rev. : -
Date : AUG 24, 2011
Page : 21/40

13.3.1. A/C POWER GENERATION

Test Type	Test Result?	Effect?	Distance (inches) Antenna - EUT	SigGen Output Level(s) at Effect Threshold?
Directed Test- A/C Power Generation / GENERATOR CONTROL UNIT RIGHT, TRANSFORMER RECTIFIER UNIT RIGHT, APU GENERATOR CONTROL UNIT, FCDC BATTERY CENTER, FLIGHT CONTROL POWER SUPPLY ASSEMBLY CENTER	Pass Fail	Yes No		
Cabin Test	Pass Fail	Yes No	N/A	

Observation / Comments: _____

13.3.2. FLIGHT CONTROL SYSTEMS

Test Type	Test Result?	Effect?	Distance (inches) Antenna - EUT	SigGen Output Level(s) at Effect Threshold?
Directed Test- Flight Control Systems / ACTUATOR CTRL ELEC CENTER, PRIMARY FLIGHT COMPUTER CENTER	Pass Fail	Yes No		
Cabin Test	Pass Fail	Yes No	N/A	

Observation / Comments: _____



GROUND EMI TEST PROCEDURE

Wireless 802.11a/b/g/n Devices
Boeing 777-300/-300ER Aircraft

Ref. : JC241-9081-02
Rev. : -
Date : AUG 24, 2011
Page : 22/40

13.3.3. INDICATING/ RECORDING SYSTEM

Test Type	Test Result?	Effect?	Distance (inches) Antenna - EUT	SigGen Output Level(s) at Effect Threshold?
Directed Test-Indicating / Recording System / RIGHT AIRCRAFT INFORMATION MANAGEMENT SYSTEM, QUICK ACCESS RECORDER	Pass Fail	Yes No		
Cabin Test	Pass Fail	Yes No	N/A	

Observation / Comments:

13.3.4. NAVIGATION

Test Type	Test Result?	Effect?	Distance (inches) Antenna - EUT	SigGen Output Level(s) at Effect Threshold?
Directed Test-Navigation / DIST MEAS EQUIPMENT INTERROGATOR-R, AIR TRAFFIC CONTROL TRANS-R, FOR RCVR MARKER BEACON-R, MULTI-MODE RCVR-R (MMR), AUTO DIR FINDER-R, SECONDARY ALTITUDE AIR DATA REF UNIT	Pass Fail	Yes No		
Cabin Test	Pass Fail	Yes No	N/A	

Observation / Comments:



GROUND EMI TEST PROCEDURE

Wireless 802.11a/b/g/n Devices
Boeing 777-300/-300ER Aircraft

Ref. : JC241-9081-02
Rev. : -
Date : AUG 24, 2011
Page : 23/40

13.3.5. COMMUNICATIONS

Test Type	Test Result?	Effect?	Distance (inches) Antenna - EUT	SigGen Output Level(s) at Effect Threshold?
Directed Test-Communications / VHF COMM UNIT-R	Pass Fail	Yes No		
Cabin Test	Pass Fail	Yes No	N/A	

Observation / Comments:

13.3.6. PNEUMATIC

Test Type	Test Result?	Effect?	Distance (inches) Antenna - EUT	SigGen Output Level(s) at Effect Threshold?
Directed Test-Pneumatic / AIR SUPPLY CABIN PRESS CTRL	Pass Fail	Yes No		
Cabin Test	Pass Fail	Yes No	N/A	

Observation / Comments:



GROUND EMI TEST PROCEDURE

Wireless 802.11a/b/g/n Devices
Boeing 777-300/-300ER Aircraft

Ref. : JC241-9081-02
Rev. : -
Date : AUG 24, 2011
Page : 24/40

13.3.7. ENGINE INDICATING

Test Type	Test Result?	Effect?	Distance (inches) Antenna - EUT	SigGen Output Level(s) at Effect Threshold?
Directed Test- Engine Indicating / ENGINE VIBRATION MONITOR-R	Pass Fail	Yes No		
Cabin Test	Pass Fail	Yes No	N/A	

Observation / Comments:

13.3.8. AUTO FLIGHT

Test Type	Test Result?	Effect?	Distance (inches) Antenna - EUT	SigGen Output Level(s) at Effect Threshold?
Directed Test- Auto Flight / AUTO PILOT FLIGHT DIRECTOR COMPUTER-R (AFDC)	Pass Fail	Yes No		
Cabin Test	Pass Fail	Yes No	N/A	

Observation / Comments:



GROUND EMI TEST PROCEDURE

Wireless 802.11a/b/g/n Devices
Boeing 777-300/-300ER Aircraft

Ref. : JC241-9081-02
Rev. : -
Date : AUG 24, 2011
Page : 25/40

13.3.9. DE-ICING

Test Type	Test Result?	Effect?	Distance (inches) Antenna - EUT	SigGen Output Level(s) at Effect Threshold?
Directed Test- De-Icing / WINDOW HEAT & CTRL UNIT R FWD & L SIDE	Pass Fail	Yes No		
Cabin Test	Pass Fail	Yes No	N/A	

Observation / Comments:

13.4. ANTENNA POSITION #4 – E3 EQUIPMENT RACK

Position test antenna(s) a maximum of 40" FWD of rack face (reference JC241-9081-04 Test Procedure Diagram). Exercise and monitor the following systems. Reference the aircraft maintenance manual (AMM), if necessary, for guidance on operational test procedures.

Antenna Position #4, E3 Equipment Rack Systems / Equipment	
System	Test Record
A/C Power Generation / TRANSFORMER RECTIFIER UNIT CENTER-2, TRANSFORMER RECTIFIER UNIT CENTER-1, MAIN BATTERY CHARGER, STATIC INVERTER, STATIC INVERTER TOWING	13.4.1
Navigation / AIR DATA AND INERTIAL REFERENCE UNIT	13.4.2
Indicating / Recording System / LEFT AIRCRAFT INFORMATION MANAGEMENT SYSTEM	13.4.3



GROUND EMI TEST PROCEDURE

Wireless 802.11a/b/g/n Devices
Boeing 777-300/-300ER Aircraft

Ref.	:	JC241-9081-02
Rev.	:	-
Date	:	AUG 24, 2011
Page	:	26/40

13.4.1. A/C POWER GENERATION

Test Type	Test Result?	Effect?	Distance (inches) Antenna - EUT	SigGen Output Level(s) at Effect Threshold?
Directed Test- A/C Power Generation / TRANSFORMER RECTIFIER UNIT CENTER-2, TRANSFORMER RECTIFIER UNIT CENTER-1, MAIN BATTERY CHARGER, STATIC INVERTER, STATIC INVERTER TOWING	Pass Fail	Yes No		
Cabin Test	Pass Fail	Yes No	N/A	

Observation / Comments:

13.4.2. NAVIGATION

Test Type	Test Result?	Effect?	Distance (inches) Antenna - EUT	SigGen Output Level(s) at Effect Threshold?
Directed Test- Navigation / AIR DATA AND INERTIAL REFERENCE UNIT	Pass Fail	Yes No		
Cabin Test	Pass Fail	Yes No	N/A	

Observation / Comments:



GROUND EMI TEST PROCEDURE

Wireless 802.11a/b/g/n Devices
Boeing 777-300/-300ER Aircraft

Ref.	:	JC241-9081-02
Rev.	:	-
Date	:	AUG 24, 2011
Page	:	27/40

13.4.3. INDICATING/RECORDING SYSTEM

Test Type	Test Result?	Effect?	Distance (inches) Antenna - EUT	SigGen Output Level(s) at Effect Threshold?
Directed Test-Indicating / Recording System / LEFT AIRCRAFT INFORMATION MANAGEMENT SYSTEM	Pass Fail	Yes No		
Cabin Test	Pass Fail	Yes No	N/A	

Observation / Comments:

13.5. ANTENNA POSITION #5 – E4 EQUIPMENT RACK

Position test antenna(s) 40" AFT of rack face (reference JC241-9081-04 Test Procedure Diagram). Exercise and monitor the following systems. Reference the aircraft maintenance manual (AMM), if necessary, for guidance on operational test procedures.

Antenna Position #5, E4 Equipment Rack Systems / Equipment	
System	Test Record
A/C Power Generation / BACKUP CONVERTER	13.5.1
Flight Controls / FLAP/SLAT ELECTRONICS UNIT 2	13.5.2
Engine- Fuel and Control / ENGINE DATA INTERFACE UNIT	13.5.3
Auto Flight / AUTOPILOT FLIGHT DIRECTOR COMPUTER CENTER	13.5.4
Information Systems / FIRST OFFICER ELEC FLIGHT BAG	13.5.5
Indicating/Recording System / WARNING ELECTRONICS UNIT RIGHT	13.5.6
Landing Gear / PROXIMITY SENSOR ELECTRONICS UNIT 2	13.5.7



GROUND EMI TEST PROCEDURE

Wireless 802.11a/b/g/n Devices
Boeing 777-300/-300ER Aircraft

Ref. : JC241-9081-02
Rev. : -
Date : AUG 24, 2011
Page : 28/40

13.5.1. A/C POWER GENERATION

Test Type	Test Result?	Effect?	Distance (inches) Antenna - EUT	SigGen Output Level(s) at Effect Threshold?
Directed Test- A/C Power Generation / Backup Converter	Pass Fail	Yes No		
Cabin Test	Pass Fail	Yes No	N/A	

Observation / Comments:

13.5.2. FLIGHT CONTROLS

Test Type	Test Result?	Effect?	Distance (inches) Antenna - EUT	SigGen Output Level(s) at Effect Threshold?
Directed Test- Flight Controls / FLAP/SLAT ELECTRONCS UNIT 2	Pass Fail	Yes No		
Cabin Test	Pass Fail	Yes No	N/A	

Observation / Comments:



GROUND EMI TEST PROCEDURE

Wireless 802.11a/b/g/n Devices
Boeing 777-300/-300ER Aircraft

Ref. : JC241-9081-02
Rev. : -
Date : AUG 24, 2011
Page : 29/40

13.5.3. ENGINE- FUEL AND CONTROL

Test Type	Test Result?	Effect?	Distance (inches) Antenna - EUT	SigGen Output Level(s) at Effect Threshold?
Directed Test- Engine-Fuel and Control / ENGINE DATA INTERFACE UNIT	Pass Fail	Yes No		
Cabin Test	Pass Fail	Yes No	N/A	

Observation / Comments:

13.5.4. AUTO FLIGHT

Test Type	Test Result?	Effect?	Distance (inches) Antenna - EUT	SigGen Output Level(s) at Effect Threshold?
Auto Flight / AUTOPILOT FLIGHT DIRECTOR COMPUTER CENTER	Pass Fail	Yes No		
Cabin Test	Pass Fail	Yes No	N/A	

Observation / Comments:



GROUND EMI TEST PROCEDURE

Wireless 802.11a/b/g/n Devices
Boeing 777-300/-300ER Aircraft

Ref. : JC241-9081-02
Rev. : -
Date : AUG 24, 2011
Page : 30/40

13.5.5. INFORMATION SYSTEMS

Test Type	Test Result?	Effect?	Distance (inches) Antenna - EUT	SigGen Output Level(s) at Effect Threshold?
Information Systems / FIRST OFFICER ELEC FLIGHT BAG	Pass Fail	Yes No		
Cabin Test	Pass Fail	Yes No	N/A	

Observation / Comments:

13.5.6. INDICATING/RECORDING SYSTEM

Test Type	Test Result?	Effect?	Distance (inches) Antenna - EUT	SigGen Output Level(s) at Effect Threshold?
Indicating/Recording System / WARNING ELECTRONICS UNIT RIGHT	Pass Fail	Yes No		
Cabin Test	Pass Fail	Yes No	N/A	

Observation / Comments:



GROUND EMI TEST PROCEDURE

Wireless 802.11a/b/g/n Devices
Boeing 777-300/-300ER Aircraft

Ref. : JC241-9081-02
Rev. : -
Date : AUG 24, 2011
Page : 31/40

13.5.7. LANDING GEAR

Test Type	Test Result?	Effect?	Distance (inches) Antenna - EUT	SigGen Output Level(s) at Effect Threshold?
Landing Gear / PROXIMITY SENSOR ELECTRONICS UNIT 2	Pass Fail	Yes No		
Cabin Test	Pass Fail	Yes No	N/A	

Observation / Comments:

13.6. ANTENNA POSITION #6 – E5 EQUIPMENT RACK

Position test antenna(s) 40" AFT of rack face (reference JC241-9081-04 Test Procedure Diagram). Exercise and monitor the following systems. Reference the aircraft maintenance manual (AMM), if necessary, for guidance on operational test procedures.

Antenna Position #6, E5 Equipment Rack Systems / Equipment	
System	Test Record
A/C Power Generation / FLIGHT CONTROL POWER SUPPLY ASSEMBLY RIGHT, FCDC BATTERY RIGHT	13.6.1
Flight Controls / ACTUATOR CONT ELEC RIGHT	13.6.2
Navigation / RADIO ALT XCVR RIGHT, RADIO ALT XCVR CENTER, RADIO ALT XCVR LEFT	13.6.3
Fuel / FUEL QTY PROCESSOR UNIT, PROG SWITCH MODULE FUEL QTY	13.6.4



GROUND EMI TEST PROCEDURE

Wireless 802.11a/b/g/n Devices
Boeing 777-300/-300ER Aircraft

Ref. : JC241-9081-02
Rev. : -
Date : AUG 24, 2011
Page : 32/40

13.6.1. A/C POWER GENERATION

Test Type	Test Result?	Effect?	Distance (inches) Antenna - EUT	SigGen Output Level(s) at Effect Threshold?
A/C Power Generation / FLIGHT CONTROL POWER SUPPLY ASSEMBLY RIGHT, FCDC BATTERY RIGHT	Pass Fail	Yes No		
Cabin Test	Pass Fail	Yes No	N/A	

Observation / Comments:

13.6.2. FLIGHT CONTROLS

Test Type	Test Result?	Effect?	Distance (inches) Antenna - EUT	SigGen Output Level(s) at Effect Threshold?
Flight Controls / ACTUATOR CONT ELEC RIGHT	Pass Fail	Yes No		
Cabin Test	Pass Fail	Yes No	N/A	

Observation / Comments:



GROUND EMI TEST PROCEDURE

Wireless 802.11a/b/g/n Devices
Boeing 777-300/-300ER Aircraft

Ref. : JC241-9081-02
Rev. : -
Date : AUG 24, 2011
Page : 33/40

13.6.3. NAVIGATION

Test Type	Test Result?	Effect?	Distance (inches) Antenna - EUT	SigGen Output Level(s) at Effect Threshold?
Navigation / RADIO ALT XCVR RIGHT, RADIO ALT XCVR CENTER, RADIO ALT XCVR LEFT	Pass Fail	Yes No		
Cabin Test	Pass Fail	Yes No	N/A	

Observation / Comments:

13.6.4. FUEL

Test Type	Test Result?	Effect?	Distance (inches) Antenna - EUT	SigGen Output Level(s) at Effect Threshold?
Fuel / FUEL QTY PROCESSOR UNIT, PROG SWITCH MODULE FUEL QTY	Pass Fail	Yes No		
Cabin Test	Pass Fail	Yes No	N/A	

Observation / Comments:



GROUND EMI TEST PROCEDURE

Wireless 802.11a/b/g/n Devices
Boeing 777-300/-300ER Aircraft

Ref. : JC241-9081-02
Rev. : -
Date : AUG 24, 2011
Page : 34/40

13.7. ANTENNA POSITION #7 – E6 EQUIPMENT RACK

Position test antenna(s) centered between racks, maximum of 40” from rack face (reference JC241-9081-04 Test Procedure Diagram). Exercise and monitor the following systems. Reference the aircraft maintenance manual (AMM), if necessary, for guidance on operational test procedures.

Antenna Position #7, E6 Equipment Rack Systems / Equipment	
System	Test Record
Communications / HIGH FREQUENCY COMM UNIT RIGHT, HIGH FREQUENCY COMM UNIT LEFT	13.7.1
Landing Gear and Hydraulics / BRAKE TEMP MON UNIT, BRAKE SYSTEM CONTROL UNIT, TIRE PRESS MON UNIT, AFT AXLE STEER CTRL UNIT, TIRE AND BRAKE MON UNIT (TBMU)	13.7.2

13.7.1. COMMUNICATIONS

Test Type	Test Result?	Effect?	Distance (inches) Antenna - EUT	SigGen Output Level(s) at Effect Threshold?
Communications / HIGH FREQUENCY COMM UNIT RIGHT, HIGH FREQUENCY COMM UNIT LEFT	Pass Fail	Yes No		
Cabin Test	Pass Fail	Yes No	N/A	

Observation / Comments: _____



GROUND EMI TEST PROCEDURE

Wireless 802.11a/b/g/n Devices
Boeing 777-300/-300ER Aircraft

Ref. : JC241-9081-02
Rev. : -
Date : AUG 24, 2011
Page : 35/40

13.7.2. LANDING GEAR

Test Type	Test Result?	Effect?	Distance (inches) Antenna - EUT	SigGen Output Level(s) at Effect Threshold?
Landing Gear and Hydraulics / BRAKE TEMP MON UNIT, BRAKE SYSTEM CONTROL UNIT, TIRE PRESS MON UNIT, AFT AXLE STEER CTRL UNIT, TIRE AND BRAKE MON UNIT (TBMU)	Pass Fail	Yes No		
Cabin Test	Pass Fail	Yes No	N/A	

Observation / Comments:



GROUND EMI TEST PROCEDURE

Wireless 802.11a/b/g/n Devices
Boeing 777-300/-300ER Aircraft

Ref. : JC241-9081-02
Rev. : -
Date : AUG 24, 2011
Page : 36/40

13.8. ANTENNA POSITION #8 – E7 EQUIPMENT RACK

Position test antenna(s) 40” from rack face (reference JC241-9081-04 Test Procedure Diagram). Exercise and monitor the following systems. Reference the aircraft maintenance manual (AMM), if necessary, for guidance on operational test procedures.

Antenna Position #8, E7 Equipment Rack Systems / Equipment	
System	Test Record
Communications / VOICE RECORDER, FLIGHT DATA RECORDER	13.8.1

13.8.1. COMMUNICATIONS

Test Type	Test Result?	Effect?	Distance (inches) Antenna - EUT	SigGen Output Level(s) at Effect Threshold?
Communications / VOICE RECORDER, FLIGHT DATA RECORDER	Pass Fail	Yes No		
Cabin Test	Pass Fail	Yes No	N/A	

Observation / Comments:



GROUND EMI TEST PROCEDURE

Wireless 802.11a/b/g/n Devices
Boeing 777-300/-300ER Aircraft

Ref.	:	JC241-9081-02
Rev.	:	-
Date	:	AUG 24, 2011
Page	:	37/40

13.9. ANTENNA POSITION #9 – E10 EQUIPMENT RACK

Position test antenna(s) 40" from rack face (reference JC241-9049-04 Test Procedure Diagram). Exercise and monitor the following systems. Reference the aircraft maintenance manual (AMM), if necessary, for guidance on operational test procedures.

Antenna Position #9, E10 Equipment Rack Systems / Equipment	
System	Test Record
A/C Power Generation / AUXILIARY POWER UNIT BATTERY CHARGER, APU BATTERY CURRENT, APU BATTERY	13.9.1

13.9.1. A/C POWER GENERATION

Test Type	Test Result?	Effect?	Distance (inches) Antenna - EUT	SigGen Output Level(s) at Effect Threshold?
A/C Power Generation / AUXILIARY POWER UNIT BATTERY CHARGER, APU BATTERY CURRENT, APU BATTERY	Pass Fail	Yes No		
Cabin Test	Pass Fail	Yes No	N/A	

Observation / Comments: _____



GROUND EMI TEST PROCEDURE

Wireless 802.11a/b/g/n Devices
Boeing 777-300/-300ER Aircraft

Ref.	:	JC241-9081-02
Rev.	:	-
Date	:	AUG 24, 2011
Page	:	38/40

13.10. ANTENNA POSITION #10 – E11 EQUIPMENT RACK

Position test antenna(s) 40” from rack face (reference JC241-9081-04 Test Procedure Diagram). Exercise and monitor the following systems. Reference the aircraft maintenance manual (AMM), if necessary, for guidance on operational test procedures.

Antenna Position #10, E11 Equipment Rack Systems / Equipment	
System	Test Record
Communications / LEFT SATELLITE DATA UNIT, LEFT HIGH POWER AMPLIFIER HIGH GAIN ANTENNA, HIGH SPEED DATA UNIT	13.10.1

13.10.1. COMMUNICATIONS

Test Type	Test Result?	Effect?	Distance (inches) Antenna - EUT	SigGen Output Level(s) at Effect Threshold?
Communications / LEFT SATELLITE DATA UNIT, LEFT HIGH POWER AMPLIFIER HIGH GAIN ANTENNA, HIGH SPEED DATA UNIT	Pass Fail	Yes No		
Cabin Test	Pass Fail	Yes No	N/A	

Observation / Comments: _____



GROUND EMI TEST PROCEDURE

Wireless 802.11a/b/g/n Devices
Boeing 777-300/-300ER Aircraft

Ref.	:	JC241-9081-02
Rev.	:	-
Date	:	AUG 24, 2011
Page	:	39/40

13.11. ANTENNA POSITION #11 – E16 EQUIPMENT RACK

Position test antenna(s) 40” from rack face (reference JC241-9081-04 Test Procedure Diagram). Exercise and monitor the following systems. Reference the aircraft maintenance manual (AMM), if necessary, for guidance on operational test procedures.

Antenna Position #11, E16 Equipment Rack Systems / Equipment	
System	Test Record
Flight Control / PRIMARY FLIGHT COMPUTER-RIGHT	13.11.1
Misc / CONTROLLER CARGO SYSTEM, CARGO MAINT DISPLAY UNIT	13.11.2
Additional Equipment /	13.11.3

13.11.1. FLIGHT CONTROL

Test Type	Test Result?	Effect?	Distance (inches) Antenna - EUT	SigGen Output Level(s) at Effect Threshold?
Flight Control / Primary Flight Computer - Right	Pass Fail	Yes No		
Cabin Test	Pass Fail	Yes No	N/A	

Observation / Comments: _____

13.11.2. MISC

Test Type	Test Result?	Effect?	Distance (inches) Antenna - EUT	SigGen Output Level(s) at Effect Threshold?
Misc / CONTROLLER CARGO SYSTEM	Pass Fail	Yes No		
Cabin Test	Pass Fail	Yes No	N/A	

Observation / Comments: _____



GROUND EMI TEST PROCEDURE

Wireless 802.11a/b/g/n Devices
Boeing 777-300/-300ER Aircraft

Ref. : JC241-9081-02
Rev. : -
Date : AUG 24, 2011
Page : 40/40

13.12. ANTENNA POSITION #12 – E17 EQUIPMENT RACK

Position test antenna(s) 40” from rack face (reference JC241-9049-04 Test Procedure Diagram). Exercise and monitor the following systems. Reference the aircraft maintenance manual (AMM), if necessary, for guidance on operational test procedures.

Antenna Position #12, E17 Equipment Rack Systems / Equipment	
System	Test Record
Misc / CONTROLLER CARGO SYSTEM	13.12.1

13.12.1. MISC

Test Type	Test Result?	Effect?	Distance (inches) Antenna - EUT	SigGen Output Level(s) at Effect Threshold?
Misc / CONTROLLER CARGO SYSTEM	Pass Fail	Yes No		
Cabin Test	Pass Fail	Yes No	N/A	

14. CONCLUSION

If no anomalous system responses are noted while performing these tests, then the T-PEDs identified within this document will be considered electromagnetically compatible with the Boeing 777-300/300ER series aircraft and in compliance with 14 CFR 25.1309(a).