



## DECLARATION OF COMPLIANCE: MPE ASSESSMENT Report Part 2 of 2

### Motorola Solutions Inc. EME Test Laboratory

Motorola Solutions Malaysia Sdn Bhd  
Plot 2A, Medan Bayan Lepas,  
Mukim 12 SWD 11900 Bayan Lepas Penang, Malaysia.

Date of Report: 03/02/2020  
Report Revision: A

**Responsible Engineer:** Goh Jue Yie (EME Engineer)  
**Report author:** Goh Jue Yie (EME Engineer)  
**Date(s) Tested:** 2/17/2017-3/17/2017; 12/25/2019- 12/27/2019; 2/09/2020 - 2/12/2020  
**Manufacturer:** Futurecom Systems Group (DVR), Motorola Solutions. Inc (Mobile)  
**Date submitted for test:** 01/13/2017; 04/12/2019  
**DUT Description:** **APX6500 UHF R1:** Multiple HW Encryption WiFi Interoperability Data Modem Tethering via WiFi or Cable  
**Companion Device:** DVR UHF (380-512 MHz), Digital Vehicular Repeater  
**Test TX mode(s):** CW  
**Max. Power output:** **APX6500 UHF R1:** 48W (380-470 MHz); 11.22 mW (Bluetooth); 6.3 mW (Bluetooth LE); 39.8 mW (WLAN 2.4GHz 802.11b), 15.8 mW (WLAN 2.4GHz 802.11g), 12.6mW (WLAN 2.4GHz 802.11n); 15.8mW (WLAN 5GHz 802.11a/n/ac)  
**Companion Device:** 10W (DVR UHF)  
**TX Frequency Bands:** **APX6500 UHF R1:** 380-470 MHz; WLAN 2412-2462 MHz; WLAN 5180-5825 MHz; BT 2402-2480 MHz  
**Companion Device:** 380-512 MHz  
**Signaling type:** FM, TDMA, FHSS (Bluetooth), 802.11b/g/n (WLAN 2.4 GHz), 802.11 a/n/ac (WLAN 5 GHz)  
**Model(s) Tested:** **APX6500 UHF R1:** M25QSS9PW1BN (PMUE5620A)  
**Companion Device:** MOBEXCOM DVRS UHF (DQPM DVR4000P, DQPM DVR5000P, DQPM DVR6000P)  
**Model(s) Certified:** M22QSS9PW1BN (PMUE5620A), M24QSS9PW1BN (PMUE5620A), M25QSS9PW1BN (PMUE5620A), M36QSS9PW1BN (PMUE5620A), M25QSS9PW1BNI (PMUE5620A), DQPM DVR4000P, DQPM DVR5000P, DQPM DVR6000P  
**Serial Number(s):** 471TVZ0903 (APX6500 UHF R1) ; 16102684, 16030465, 16102751 (DVR UHF)  
**Classification:** Occupational/Controlled Environment  
**FCC ID:** **APX6500 UHF R1:** AZ492FT7129 (406.1-470 MHz, 2402-2480 MHz, 2412-2462 MHz; 5180-5825 MHz)  
**Companion Device:** LO6-DVRSUHF (406.1-512 MHz)  
This report contains results that are immaterial for FCC equipment approval, which are clearly identified.  
**IC:** **APX6500 UHF R1:** 109U-92FT7129  
**Companion Device:** 2098B-DVRSUHF  
This report contains results that are immaterial for ISSED Canada equipment approval, which are clearly identified.

The MPE results clearly demonstrate compliance with FCC Occupational/Controlled RF Exposure limits. FCC rules require compliance for Passengers and Bystanders to the FCC General Population/Uncontrolled limits.

Based on the information and the testing results provided herein, the undersigned certifies that when used as stated in the operating instructions supplied, said product complies with the national and international reference standards and guidelines listed in section 4.0 of this report (no deviation from standard methods). This report shall not be reproduced without written approval from an officially designated representative of the Motorola Solutions Inc. EME Laboratory.

I attest to the accuracy of the data and assume full responsibility for the completeness of these measurements.

This reporting format is consistent with the suggested guidelines of the TIA TSB-159 April 2006

The results and statements contained in this report pertain only to the device(s) evaluated herein.

  
Tiong Nguk Ing  
Deputy Technical Manager (Approved Signatory)  
Approval Date: 4/2/2020

## **Appendix D – MPE Test Results Summary for APX6500 UHF R1**

**Table D.1**

MPE assessment for APX6500 UHF R1 - roof mounted antenna – Bystander

| Trunk / Roof | Test Post. | E/H Field | Antenna No. | Antenna Model        | Max Pwr (W) | Initial Pwr (W) | Tx Freq (MHz) | Max Calc. P.D. (mW/cm <sup>2</sup> ) | FCC Limit | % To FCC Spec Limit | ISED Limit | % To ISED Spec Limit |
|--------------|------------|-----------|-------------|----------------------|-------------|-----------------|---------------|--------------------------------------|-----------|---------------------|------------|----------------------|
| Roof         | BS1        | E         | 1           | HAE4003A, 450-470MHz | 48          | 46.8            | 450.0125      | 0.03                                 | 0.30      | 10.9                | 0.17       | 19.1                 |
|              |            |           |             |                      |             | 47.0            | 460.0000      | 0.03                                 | 0.31      | 9.4                 | 0.17       | 16.7                 |
|              |            |           |             |                      |             | 47.4            | 469.9875      | 0.03                                 | 0.31      | 9.3                 | 0.18       | 16.7                 |
| Roof         | BS2        | E         | 1           | HAE4003A, 450-470MHz | 48          | 46.8            | 450.0125      | 0.02                                 | 0.3       | 7.7                 | 0.23       | 10.3                 |
|              |            |           |             |                      |             | 47.0            | 460.0000      | 0.02                                 | 0.31      | 7.9                 | 0.23       | 10.6                 |
|              |            |           |             |                      |             | 47.4            | 469.9875      | 0.02                                 | 0.31      | 6.5                 | 0.23       | 8.7                  |
| Roof         | BS3        | E         | 1           | HAE4003A, 450-470MHz | 48          | 46.8            | 450.0125      | 0.02                                 | 0.30      | 6.0                 | 0.17       | 10.6                 |
|              |            |           |             |                      |             | 47.0            | 460.0000      | 0.02                                 | 0.31      | 5.7                 | 0.17       | 10.1                 |
|              |            |           |             |                      |             | 47.4            | 469.9875      | 0.01                                 | 0.31      | 4.7                 | 0.18       | 8.5                  |
| Roof         | BS4        | E         | 1           | HAE4003A, 450-470MHz | 48          | 46.8            | 450.0125      | 0.01                                 | 0.30      | 4.2                 | 0.17       | 7.4                  |
|              |            |           |             |                      |             | 47.0            | 460.0000      | 0.01                                 | 0.31      | 2.8                 | 0.17       | 5.0                  |
|              |            |           |             |                      |             | 47.4            | 469.9875      | 0.01                                 | 0.31      | 3.9                 | 0.17       | 7.0                  |
| Roof         | BS5        | E         | 1           | HAE4003A, 450-470MHz | 48          | 46.8            | 450.0125      | 0.01                                 | 0.30      | 1.9                 | 0.17       | 3.4                  |
|              |            |           |             |                      |             | 47              | 460.0000      | 0.01                                 | 0.31      | 2.0                 | 0.17       | 3.6                  |
|              |            |           |             |                      |             | 47.4            | 469.9875      | 0.01                                 | 0.31      | 1.9                 | 0.18       | 3.3                  |
| Roof         | BS1        | E         | 2           | HAE4011A, 450-470MHz | 48          | 46.8            | 450.0125      | 0.02                                 | 0.30      | 7.4                 | 0.17       | 13.1                 |
|              |            |           |             |                      |             | 47.0            | 460.0000      | 0.02                                 | 0.31      | 7.9                 | 0.17       | 14.1                 |
|              |            |           |             |                      |             | 47.4            | 469.9875      | 0.02                                 | 0.31      | 5.7                 | 0.18       | 10.1                 |
| Roof         | BS2        | E         | 2           | HAE4011A, 450-470MHz | 48          | 46.8            | 450.0125      | 0.02                                 | 0.30      | 6.0                 | 0.17       | 10.5                 |
|              |            |           |             |                      |             | 47.0            | 460.0000      | 0.02                                 | 0.31      | 7.5                 | 0.17       | 13.4                 |
|              |            |           |             |                      |             | 47.4            | 469.9875      | 0.02                                 | 0.31      | 4.9                 | 0.18       | 8.7                  |
| Roof         | BS3        | E         | 2           | HAE4011A, 450-470MHz | 48          | 46.8            | 450.0125      | 0.01                                 | 0.30      | 4.6                 | 0.17       | 8.2                  |
|              |            |           |             |                      |             | 47.0            | 460.0000      | 0.01                                 | 0.31      | 4.5                 | 0.17       | 7.9                  |
|              |            |           |             |                      |             | 47.4            | 469.9875      | 0.01                                 | 0.31      | 3.4                 | 0.18       | 6.1                  |

**Table D.1 (Continued)****MPE assessment for APX6500 UHF R1 - roof mounted antenna – Bystander**

Note:

Blue fonts: Frequencies not regulated by FCC.

| Trunk / Roof | Test Post. | E/H Field | Antenna No. | Antenna Model        | Max Pwr (W) | Initial Pwr (W) | Tx Freq (MHz) | Max Calc. P.D. (mW/cm <sup>2</sup> ) | FCC Limit | % To FCC Spec Limit | ISED Limit | % To ISED Spec Limit |
|--------------|------------|-----------|-------------|----------------------|-------------|-----------------|---------------|--------------------------------------|-----------|---------------------|------------|----------------------|
| Roof         | BS4        | E         | 2           | HAE4011A, 450-470MHz | 48          | 46.8            | 450.0125      | 0.01                                 | 0.30      | 3.2                 | 0.17       | 5.7                  |
|              |            |           |             |                      |             | 47.0            | 460.0000      | 0.01                                 | 0.31      | 3.2                 | 0.17       | 5.7                  |
|              |            |           |             |                      |             | 47.4            | 469.9875      | 0.01                                 | 0.31      | 1.4                 | 0.18       | 7.3                  |
| Roof         | BS5        | E         | 2           | HAE4011A, 450-470MHz | 48          | 46.8            | 450.0125      | 0.01                                 | 0.30      | 4.0                 | 0.17       | 7.1                  |
|              |            |           |             |                      |             | 47.0            | 460.0000      | 0.01                                 | 0.31      | 2.9                 | 0.17       | 5.1                  |
|              |            |           |             |                      |             | 47.4            | 469.9875      | 0.01                                 | 0.31      | 2.3                 | 0.18       | 4.1                  |
| Roof         | BS1        | E         | 3           | HAE6010A, 380-433MHz | 48          | 47.6            | 380.0125      | 0.01                                 | 0.25      | 5.1                 | 0.15       | 8.5                  |
|              |            |           |             |                      |             | 47.6            | 393.0125      | 0.01                                 | 0.26      | 5.4                 | 0.16       | 9.1                  |
|              |            |           |             |                      |             | 47.1            | 406.5000      | 0.01                                 | 0.27      | 4.9                 | 0.16       | 8.3                  |
|              |            |           |             |                      |             | 47.4            | 419.5000      | 0.01                                 | 0.28      | 5.1                 | 0.16       | 8.8                  |
|              |            |           |             |                      |             | 46.6            | 432.9875      | 0.02                                 | 0.29      | 5.4                 | 0.17       | 9.3                  |
| Roof         | BS2        | E         | 3           | HAE6010A, 380-433MHz | 48          | 47.6            | 380.0125      | 0.01                                 | 0.25      | 3.9                 | 0.15       | 6.4                  |
|              |            |           |             |                      |             | 47.6            | 393.0125      | 0.01                                 | 0.26      | 4.6                 | 0.16       | 7.7                  |
|              |            |           |             |                      |             | 47.1            | 406.5000      | 0.01                                 | 0.27      | 4.7                 | 0.16       | 8.1                  |
|              |            |           |             |                      |             | 47.4            | 419.5000      | 0.01                                 | 0.28      | 4.6                 | 0.16       | 7.9                  |
|              |            |           |             |                      |             | 46.6            | 432.9875      | 0.01                                 | 0.29      | 4.3                 | 0.17       | 7.6                  |
| Roof         | BS3        | E         | 3           | HAE6010A, 380-433MHz | 48          | 47.6            | 380.0125      | 0.01                                 | 0.25      | 2.4                 | 0.15       | 3.9                  |
|              |            |           |             |                      |             | 47.6            | 393.0125      | 0.01                                 | 0.26      | 3.1                 | 0.16       | 5.3                  |
|              |            |           |             |                      |             | 47.1            | 406.5000      | 0.01                                 | 0.27      | 3.1                 | 0.16       | 5.2                  |
|              |            |           |             |                      |             | 47.4            | 419.5000      | 0.01                                 | 0.28      | 3.5                 | 0.16       | 6.1                  |
|              |            |           |             |                      |             | 46.6            | 432.9875      | 0.01                                 | 0.29      | 3.8                 | 0.17       | 6.7                  |
| Roof         | BS4        | E         | 3           | HAE6010A, 380-433MHz | 48          | 47.6            | 380.0125      | 0.00                                 | 0.25      | 1.3                 | 0.15       | 2.1                  |
|              |            |           |             |                      |             | 47.6            | 393.0125      | 0.01                                 | 0.26      | 1.9                 | 0.16       | 3.3                  |
|              |            |           |             |                      |             | 47.1            | 406.5000      | 0.01                                 | 0.27      | 3.1                 | 0.16       | 5.3                  |
|              |            |           |             |                      |             | 47.4            | 419.5000      | 0.01                                 | 0.28      | 2.7                 | 0.16       | 4.6                  |
|              |            |           |             |                      |             | 46.6            | 432.9875      | 0.01                                 | 0.29      | 1.9                 | 0.17       | 3.3                  |

**Table D.1 (Continued)****MPE assessment for APX6500 UHF R1 - roof mounted antenna – Bystander**

Note:

Blue fonts: Frequencies not regulated by FCC.

| Trunk / Roof | Test Post. | E/H Field | Antenna No. | Antenna Model        | Max Pwr (W) | Initial Pwr (W) | Tx Freq (MHz) | Max Calc. P.D. (mW/cm <sup>2</sup> ) | FCC Limit | % To FCC Spec Limit | ISED Limit | % To ISED Spec Limit |
|--------------|------------|-----------|-------------|----------------------|-------------|-----------------|---------------|--------------------------------------|-----------|---------------------|------------|----------------------|
| Roof         | BS5        | E         | 3           | HAE6010A, 380-433MHz | 48          | 47.6            | 380.0125      | 0.00                                 | 0.25      | 0.3                 | 0.15       | 0.4                  |
|              |            |           |             |                      |             | 47.6            | 393.0125      | 0.00                                 | 0.26      | 0.5                 | 0.16       | 0.8                  |
|              |            |           |             |                      |             | 47.1            | 406.5000      | 0.00                                 | 0.27      | 0.7                 | 0.16       | 1.2                  |
|              |            |           |             |                      |             | 47.4            | 419.5000      | 0.00                                 | 0.28      | 1.5                 | 0.16       | 2.7                  |
|              |            |           |             |                      |             | 46.6            | 432.9875      | 0.00                                 | 0.29      | 1.2                 | 0.17       | 2.1                  |
| Roof         | BS1        | E         | 4           | HAE6011A, 380-433MHz | 48          | 47.6            | 380.0125      | 0.01                                 | 0.25      | 4.3                 | 0.15       | 7.2                  |
|              |            |           |             |                      |             | 47.6            | 393.0125      | 0.01                                 | 0.26      | 4.0                 | 0.16       | 6.8                  |
|              |            |           |             |                      |             | 47.1            | 406.5000      | 0.01                                 | 0.27      | 4.2                 | 0.16       | 7.1                  |
|              |            |           |             |                      |             | 47.4            | 419.5000      | 0.01                                 | 0.28      | 3.6                 | 0.16       | 6.3                  |
|              |            |           |             |                      |             | 46.6            | 432.9875      | 0.01                                 | 0.29      | 2.0                 | 0.17       | 3.5                  |
| Roof         | BS2        | E         | 4           | HAE6011A, 380-433MHz | 48          | 47.6            | 380.0125      | 0.02                                 | 0.25      | 8.4                 | 0.15       | 14.0                 |
|              |            |           |             |                      |             | 47.6            | 393.0125      | 0.02                                 | 0.26      | 8.1                 | 0.16       | 13.7                 |
|              |            |           |             |                      |             | 47.1            | 406.5000      | 0.02                                 | 0.27      | 6.1                 | 0.16       | 10.4                 |
|              |            |           |             |                      |             | 47.4            | 419.5000      | 0.02                                 | 0.28      | 6.4                 | 0.16       | 10.9                 |
|              |            |           |             |                      |             | 46.6            | 432.9875      | 0.01                                 | 0.29      | 4.1                 | 0.17       | 7.2                  |
| Roof         | BS3        | E         | 4           | HAE6011A, 380-433MHz | 48          | 47.6            | 380.0125      | 0.02                                 | 0.25      | 5.9                 | 0.15       | 9.9                  |
|              |            |           |             |                      |             | 47.6            | 393.0125      | 0.02                                 | 0.26      | 7.3                 | 0.16       | 12.3                 |
|              |            |           |             |                      |             | 47.1            | 406.5000      | 0.03                                 | 0.27      | 9.4                 | 0.16       | 16.0                 |
|              |            |           |             |                      |             | 47.4            | 419.5000      | 0.01                                 | 0.28      | 4.7                 | 0.16       | 8.2                  |
|              |            |           |             |                      |             | 46.6            | 432.9875      | 0.01                                 | 0.29      | 3.1                 | 0.17       | 5.4                  |

**Table D.1 (Continued)****MPE assessment for APX6500 UHF R1 - roof mounted antenna – Bystander**

Note:

Blue fonts: Frequencies not regulated by FCC.

| Trunk / Roof | Test Post. | E/H Field | Antenna No. | Antenna Model        | Max Pwr (W) | Initial Pwr (W) | Tx Freq (MHz) | Max Calc. P.D. (mW/cm <sup>2</sup> ) | FCC Limit | % To FCC Spec Limit | ISED Limit | % To ISED Spec Limit |
|--------------|------------|-----------|-------------|----------------------|-------------|-----------------|---------------|--------------------------------------|-----------|---------------------|------------|----------------------|
| Roof         | BS4        | E         | 4           | HAE6011A, 380-433MHz | 48          | 47.6            | 380.0125      | 0.01                                 | 0.25      | 4.3                 | 0.15       | 7.1                  |
|              |            |           |             |                      |             | 47.6            | 393.0125      | 0.02                                 | 0.26      | 6.3                 | 0.16       | 10.7                 |
|              |            |           |             |                      |             | 47.1            | 406.5000      | 0.01                                 | 0.27      | 3.6                 | 0.16       | 6.1                  |
|              |            |           |             |                      |             | 47.4            | 419.5000      | 0.01                                 | 0.28      | 3.2                 | 0.16       | 5.4                  |
|              |            |           |             |                      |             | 46.6            | 432.9875      | 0.01                                 | 0.29      | 1.9                 | 0.17       | 3.4                  |
| Roof         | BS5        | E         | 4           | HAE6011A, 380-433MHz | 48          | 47.6            | 380.0125      | 0.01                                 | 0.25      | 4.3                 | 0.15       | 7.2                  |
|              |            |           |             |                      |             | 47.6            | 393.0125      | 0.01                                 | 0.26      | 4.0                 | 0.16       | 6.8                  |
|              |            |           |             |                      |             | 47.1            | 406.5000      | 0.01                                 | 0.27      | 4.2                 | 0.16       | 7.1                  |
|              |            |           |             |                      |             | 47.4            | 419.5000      | 0.01                                 | 0.28      | 3.6                 | 0.16       | 6.3                  |
|              |            |           |             |                      |             | 46.6            | 432.9875      | 0.01                                 | 0.29      | 2.0                 | 0.17       | 3.5                  |
| Roof         | BS1        | E         | 5           | HAE6012A, 380-433MHz | 48          | 47.6            | 380.0125      | 0.04                                 | 0.25      | 14.0                | 0.15       | 23.3                 |
|              |            |           |             |                      |             | 47.6            | 393.0125      | 0.03                                 | 0.26      | 12.1                | 0.16       | 20.4                 |
|              |            |           |             |                      |             | 47.1            | 406.5000      | 0.03                                 | 0.27      | 11.0                | 0.16       | 18.8                 |
|              |            |           |             |                      |             | 47.4            | 419.5000      | 0.03                                 | 0.28      | 9.1                 | 0.16       | 15.7                 |
|              |            |           |             |                      |             | 46.6            | 432.9875      | 0.02                                 | 0.29      | 8.3                 | 0.17       | 14.5                 |
| Roof         | BS2        | E         | 5           | HAE6012A, 380-433MHz | 48          | 47.6            | 380.0125      | 0.03                                 | 0.25      | 10.1                | 0.15       | 16.9                 |
|              |            |           |             |                      |             | 47.6            | 393.0125      | 0.02                                 | 0.26      | 9.1                 | 0.16       | 15.4                 |
|              |            |           |             |                      |             | 47.1            | 406.5000      | 0.02                                 | 0.27      | 7.2                 | 0.16       | 12.2                 |
|              |            |           |             |                      |             | 47.4            | 419.5000      | 0.02                                 | 0.28      | 7.8                 | 0.16       | 13.5                 |
|              |            |           |             |                      |             | 46.6            | 432.9875      | 0.02                                 | 0.29      | 5.7                 | 0.17       | 9.9                  |

**Table D.1 (Continued)****MPE assessment for APX6500 UHF R1 - roof mounted antenna – Bystander**

Note:

Blue fonts: Frequencies not regulated by FCC.

| Trunk / Roof | Test Post. | E/H Field | Antenna No. | Antenna Model        | Max Pwr (W) | Initial Pwr (W) | Tx Freq (MHz) | Max Calc. P.D. (mW/cm <sup>2</sup> ) | FCC Limit | % To FCC Spec Limit | ISED Limit | % To ISED Spec Limit |
|--------------|------------|-----------|-------------|----------------------|-------------|-----------------|---------------|--------------------------------------|-----------|---------------------|------------|----------------------|
| Roof         | BS3        | E         | 5           | HAE6012A, 380-433MHz | 48          | 47.6            | 380.0125      | 0.02                                 | 0.25      | 6.9                 | 0.15       | 11.5                 |
|              |            |           |             |                      |             | 47.6            | 393.0125      | 0.02                                 | 0.26      | 8.1                 | 0.16       | 13.7                 |
|              |            |           |             |                      |             | 47.1            | 406.5000      | 0.02                                 | 0.27      | 8.9                 | 0.16       | 15.2                 |
|              |            |           |             |                      |             | 47.4            | 419.5000      | 0.02                                 | 0.28      | 6.7                 | 0.16       | 11.5                 |
|              |            |           |             |                      |             | 46.6            | 432.9875      | 0.02                                 | 0.29      | 6.7                 | 0.17       | 11.7                 |
| Roof         | BS4        | E         | 5           | HAE6012A, 380-433MHz | 48          | 47.6            | 380.0125      | 0.01                                 | 0.25      | 4.6                 | 0.15       | 7.7                  |
|              |            |           |             |                      |             | 47.6            | 393.0125      | 0.01                                 | 0.26      | 4.6                 | 0.16       | 7.8                  |
|              |            |           |             |                      |             | 47.1            | 406.5000      | 0.01                                 | 0.27      | 4.4                 | 0.16       | 7.5                  |
|              |            |           |             |                      |             | 47.4            | 419.5000      | 0.01                                 | 0.28      | 4.6                 | 0.16       | 7.8                  |
|              |            |           |             |                      |             | 46.6            | 432.9875      | 0.01                                 | 0.29      | 3.7                 | 0.17       | 6.5                  |
| Roof         | BS5        | E         | 5           | HAE6012A, 380-433MHz | 48          | 47.6            | 380.0125      | 0.01                                 | 0.25      | 2.0                 | 0.15       | 3.4                  |
|              |            |           |             |                      |             | 47.6            | 393.0125      | 0.01                                 | 0.26      | 2.1                 | 0.16       | 3.6                  |
|              |            |           |             |                      |             | 47.1            | 406.5000      | 0.01                                 | 0.27      | 2.9                 | 0.16       | 5.0                  |
|              |            |           |             |                      |             | 47.4            | 419.5000      | 0.01                                 | 0.28      | 3.4                 | 0.16       | 5.9                  |
|              |            |           |             |                      |             | 46.6            | 432.9875      | 0.01                                 | 0.29      | 2.6                 | 0.17       | 4.5                  |
| Roof         | BS1        | E         | 6           | HAE6013A, 380-470MHz | 48          | 47.6            | 380.0125      | 0.03                                 | 0.25      | 12.1                | 0.15       | 20.2                 |
|              |            |           |             |                      |             | 47.6            | 393.0125      | 0.03                                 | 0.26      | 11.4                | 0.16       | 19.3                 |
|              |            |           |             |                      |             | 47.1            | 406.5000      | 0.03                                 | 0.27      | 12.2                | 0.16       | 20.9                 |
|              |            |           |             |                      |             | 47.3            | 422.0125      | 0.03                                 | 0.28      | 11.1                | 0.16       | 19.1                 |
|              |            |           |             |                      |             | 46.7            | 438.0125      | 0.03                                 | 0.29      | 10.5                | 0.17       | 18.4                 |
|              |            |           |             |                      |             | 46.8            | 450.0125      | 0.03                                 | 0.30      | 9.1                 | 0.17       | 16.0                 |
|              |            |           |             |                      |             | 47.4            | 469.9875      | 0.02                                 | 0.31      | 7.1                 | 0.18       | 12.7                 |

**Table D.1 (Continued)****MPE assessment for APX6500 UHF R1 - roof mounted antenna – Bystander**

Note:

Blue fonts: Frequencies not regulated by FCC.

| Trunk / Roof | Test Post. | E/H Field | Antenna No. | Antenna Model        | Max Pwr (W) | Initial Pwr (W) | Tx Freq (MHz) | Max Calc. P.D. (mW/cm <sup>2</sup> ) | FCC Limit | % To FCC Spec Limit | ISED Limit | % To ISED Spec Limit |
|--------------|------------|-----------|-------------|----------------------|-------------|-----------------|---------------|--------------------------------------|-----------|---------------------|------------|----------------------|
| Roof         | BS2        | E         | 6           | HAE6013A, 380-470MHz | 48          | 47.6            | 380.0125      | 0.02                                 | 0.25      | 8.7                 | 0.15       | 14.5                 |
|              |            |           |             |                      |             | 47.6            | 393.0125      | 0.02                                 | 0.26      | 8.5                 | 0.16       | 14.3                 |
|              |            |           |             |                      |             | 47.1            | 406.5000      | 0.02                                 | 0.27      | 7.4                 | 0.16       | 12.6                 |
|              |            |           |             |                      |             | 47.3            | 422.0125      | 0.02                                 | 0.28      | 8.7                 | 0.16       | 15.1                 |
|              |            |           |             |                      |             | 46.7            | 438.0125      | 0.03                                 | 0.29      | 9.0                 | 0.17       | 15.8                 |
|              |            |           |             |                      |             | 46.8            | 450.0125      | 0.02                                 | 0.30      | 7.6                 | 0.17       | 13.4                 |
|              |            |           |             |                      |             | 47.4            | 469.9875      | 0.02                                 | 0.31      | 6.2                 | 0.18       | 11.0                 |
| Roof         | BS3        | E         | 6           | HAE6013A, 380-470MHz | 48          | 47.6            | 380.0125      | 0.02                                 | 0.25      | 6.0                 | 0.15       | 10.0                 |
|              |            |           |             |                      |             | 47.6            | 393.0125      | 0.02                                 | 0.26      | 8.1                 | 0.16       | 13.6                 |
|              |            |           |             |                      |             | 47.1            | 406.5000      | 0.03                                 | 0.27      | 10.5                | 0.16       | 18.0                 |
|              |            |           |             |                      |             | 47.3            | 422.0125      | 0.02                                 | 0.28      | 7.4                 | 0.16       | 12.7                 |
|              |            |           |             |                      |             | 46.7            | 438.0125      | 0.02                                 | 0.29      | 6.5                 | 0.17       | 11.3                 |
|              |            |           |             |                      |             | 46.8            | 450.0125      | 0.02                                 | 0.30      | 7.0                 | 0.17       | 12.3                 |
|              |            |           |             |                      |             | 47.4            | 469.9875      | 0.02                                 | 0.31      | 5.0                 | 0.18       | 8.9                  |
| Roof         | BS4        | E         | 6           | HAE6013A, 380-470MHz | 48          | 47.6            | 380.0125      | 0.01                                 | 0.25      | 4.0                 | 0.15       | 6.7                  |
|              |            |           |             |                      |             | 47.6            | 393.0125      | 0.01                                 | 0.26      | 4.7                 | 0.16       | 8.0                  |
|              |            |           |             |                      |             | 47.1            | 406.5000      | 0.01                                 | 0.27      | 4.8                 | 0.16       | 8.2                  |
|              |            |           |             |                      |             | 47.3            | 422.0125      | 0.02                                 | 0.28      | 5.6                 | 0.16       | 9.7                  |
|              |            |           |             |                      |             | 46.7            | 438.0125      | 0.01                                 | 0.29      | 3.9                 | 0.17       | 6.8                  |
|              |            |           |             |                      |             | 46.8            | 450.0125      | 0.01                                 | 0.30      | 4.4                 | 0.17       | 7.7                  |
|              |            |           |             |                      |             | 47.4            | 469.9875      | 0.01                                 | 0.31      | 4.1                 | 0.18       | 7.3                  |
| Roof         | BS5        | E         | 6           | HAE6013A, 380-470MHz | 48          | 47.6            | 380.0125      | 0.00                                 | 0.25      | 1.3                 | 0.15       | 2.2                  |
|              |            |           |             |                      |             | 47.6            | 393.0125      | 0.01                                 | 0.26      | 2.2                 | 0.16       | 3.7                  |
|              |            |           |             |                      |             | 47.1            | 406.5000      | 0.01                                 | 0.27      | 3.5                 | 0.16       | 5.9                  |
|              |            |           |             |                      |             | 47.3            | 422.0125      | 0.01                                 | 0.28      | 4.2                 | 0.16       | 7.3                  |
|              |            |           |             |                      |             | 46.7            | 438.0125      | 0.01                                 | 0.29      | 4.2                 | 0.17       | 7.2                  |
|              |            |           |             |                      |             | 46.8            | 450.0125      | 0.01                                 | 0.30      | 3.0                 | 0.17       | 5.4                  |
|              |            |           |             |                      |             | 47.4            | 469.9875      | 0.01                                 | 0.31      | 2.1                 | 0.18       | 3.7                  |



**Table D.1 (Continued)**

MPE assessment for APX6500 UHF R1 - roof mounted antenna – Bystander

| Trunk / Roof | Test Post. | E/H Field | Antenna No. | Antenna Model        | Max Pwr (W) | Initial Pwr (W) | Tx Freq (MHz) | Max Calc. P.D. (mW/cm <sup>2</sup> ) | FCC Limit | % To FCC Spec Limit | ISED Limit | % To ISED Spec Limit |
|--------------|------------|-----------|-------------|----------------------|-------------|-----------------|---------------|--------------------------------------|-----------|---------------------|------------|----------------------|
| Roof         | BS1        | E         | 7           | HAE6015A, 450-520MHz | 48          | 46.8            | 450.0125      | 0.03                                 | 0.30      | 9.6                 | 0.17       | 17.0                 |
|              |            |           |             |                      |             | 47              | 460.0000      | 0.03                                 | 0.31      | 9.8                 | 0.17       | 17.4                 |
|              |            |           |             |                      |             | 47.4            | 469.9875      | 0.03                                 | 0.31      | 8.9                 | 0.18       | 16.0                 |
| Roof         | BS2        | E         | 7           | HAE6015A, 450-520MHz | 48          | 46.8            | 450.0125      | 0.03                                 | 0.30      | 8.7                 | 0.17       | 15.4                 |
|              |            |           |             |                      |             | 47              | 460.0000      | 0.03                                 | 0.31      | 8.8                 | 0.17       | 15.7                 |
|              |            |           |             |                      |             | 47.4            | 469.9875      | 0.02                                 | 0.31      | 7.2                 | 0.18       | 12.9                 |
| Roof         | BS3        | E         | 7           | HAE6015A, 450-520MHz | 48          | 46.8            | 450.0125      | 0.02                                 | 0.30      | 6.0                 | 0.17       | 10.5                 |
|              |            |           |             |                      |             | 47              | 460.0000      | 0.02                                 | 0.31      | 6.3                 | 0.17       | 11.2                 |
|              |            |           |             |                      |             | 47.4            | 469.9875      | 0.02                                 | 0.31      | 5.9                 | 0.18       | 10.5                 |
| Roof         | BS4        | E         | 7           | HAE6015A, 450-520MHz | 48          | 46.8            | 450.0125      | 0.01                                 | 0.30      | 4.2                 | 0.17       | 7.4                  |
|              |            |           |             |                      |             | 47              | 460.0000      | 0.01                                 | 0.31      | 3.8                 | 0.17       | 6.7                  |
|              |            |           |             |                      |             | 47.4            | 469.9875      | 0.01                                 | 0.31      | 4.4                 | 0.18       | 7.9                  |
| Roof         | BS5        | E         | 7           | HAE6015A, 450-520MHz | 48          | 46.8            | 450.0125      | 0.01                                 | 0.30      | 3.3                 | 0.17       | 5.8                  |
|              |            |           |             |                      |             | 47              | 460.0000      | 0.01                                 | 0.31      | 2.5                 | 0.17       | 4.4                  |
|              |            |           |             |                      |             | 47.4            | 469.9875      | 0.01                                 | 0.31      | 2.2                 | 0.18       | 3.9                  |

**Table D.1 (Continued)****MPE assessment for APX6500 UHF R1 - roof mounted antenna – Bystander**

Note:

Blue fonts: Frequencies not regulated by FCC.

| Trunk / Roof | Test Post. | E/H Field | Antenna No. | Antenna Model          | Max Pwr (W) | Initial Pwr (W) | Tx Freq (MHz) | Max Calc. P.D. (mW/cm <sup>2</sup> ) | FCC Limit | % To FCC Spec Limit | ISED Limit | % To ISED Spec Limit |
|--------------|------------|-----------|-------------|------------------------|-------------|-----------------|---------------|--------------------------------------|-----------|---------------------|------------|----------------------|
| Roof         | BS1        | E         | 8           | HAE6016A, 450 - 512MHz | 48          | 35.2            | 450.0125      | 0.02                                 | 0.3       | 7.3                 | 0.17       | 12.9                 |
|              |            |           |             |                        |             | 35.2            | 460.0000      | 0.02                                 | 0.31      | 6.7                 | 0.17       | 11.8                 |
|              |            |           |             |                        |             | 35.0            | 469.9875      | 0.02                                 | 0.31      | 6.7                 | 0.18       | 12.0                 |
| Roof         | BS2        | E         | 8           | HAE6016A, 450 - 512MHz | 48          | 46.8            | 450.0125      | 0.02                                 | 0.3       | 6.6                 | 0.17       | 11.7                 |
|              |            |           |             |                        |             | 47.0            | 460.0000      | 0.02                                 | 0.31      | 7.2                 | 0.17       | 12.8                 |
|              |            |           |             |                        |             | 47.4            | 469.9875      | 0.02                                 | 0.31      | 6.1                 | 0.18       | 11                   |
| Roof         | BS3        | E         | 8           | HAE6016A, 450 - 512MHz | 48          | 46.8            | 450.0125      | 0.01                                 | 0.3       | 4.2                 | 0.17       | 7.3                  |
|              |            |           |             |                        |             | 47.0            | 460.0000      | 0.01                                 | 0.31      | 4.3                 | 0.17       | 7.6                  |
|              |            |           |             |                        |             | 47.4            | 469.9875      | 0.01                                 | 0.31      | 4.2                 | 0.18       | 7.5                  |
| Roof         | BS4        | E         | 8           | HAE6016A, 450 - 512MHz | 48          | 46.8            | 450.0125      | 0.01                                 | 0.3       | 3.2                 | 0.17       | 5.7                  |
|              |            |           |             |                        |             | 47.0            | 460.0000      | 0.01                                 | 0.31      | 2.8                 | 0.17       | 5                    |
|              |            |           |             |                        |             | 47.4            | 469.9875      | 0.01                                 | 0.31      | 3                   | 0.18       | 5.3                  |
| Roof         | BS5        | E         | 8           | HAE6016A, 450 - 512MHz | 48          | 46.8            | 450.0125      | 0.01                                 | 0.3       | 2.2                 | 0.17       | 3.9                  |
|              |            |           |             |                        |             | 47.0            | 460.0000      | 0.01                                 | 0.31      | 1.8                 | 0.17       | 3.3                  |
|              |            |           |             |                        |             | 47.4            | 469.9875      | 0.01                                 | 0.31      | 1.7                 | 0.18       | 3                    |
| Roof         | BS1        | E         | 9           | HAE6031A, 380-520MHz   | 48          | 47.6            | 380.0125      | 0.04                                 | 0.25      | 13.9                | 0.15       | 23.2                 |
|              |            |           |             |                        |             | 47.6            | 393.0125      | 0.03                                 | 0.26      | 11.7                | 0.16       | 19.7                 |
|              |            |           |             |                        |             | 47.1            | 406.5000      | 0.03                                 | 0.27      | 11.2                | 0.16       | 19.1                 |
|              |            |           |             |                        |             | 47.3            | 422.0125      | 0.03                                 | 0.28      | 10.7                | 0.16       | 18.5                 |
|              |            |           |             |                        |             | 46.7            | 438.0125      | 0.03                                 | 0.29      | 10.1                | 0.17       | 17.6                 |
|              |            |           |             |                        |             | 46.8            | 450.0125      | 0.03                                 | 0.3       | 10.6                | 0.17       | 18.7                 |
|              |            |           |             |                        |             | 47.4            | 469.9875      | 0.03                                 | 0.31      | 9.1                 | 0.18       | 16.3                 |
| Roof         | BS2        | E         | 9           | HAE6031A, 380-520MHz   | 48          | 47.6            | 380.0125      | 0.03                                 | 0.25      | 10.5                | 0.15       | 17.5                 |
|              |            |           |             |                        |             | 47.6            | 393.0125      | 0.02                                 | 0.26      | 8.4                 | 0.16       | 14.1                 |
|              |            |           |             |                        |             | 47.1            | 406.5000      | 0.02                                 | 0.27      | 7.5                 | 0.16       | 12.8                 |
|              |            |           |             |                        |             | 47.3            | 422.0125      | 0.02                                 | 0.28      | 8.5                 | 0.16       | 14.7                 |
|              |            |           |             |                        |             | 46.7            | 438.0125      | 0.03                                 | 0.29      | 9.5                 | 0.17       | 16.6                 |
|              |            |           |             |                        |             | 46.8            | 450.0125      | 0.03                                 | 0.3       | 8.5                 | 0.17       | 15.1                 |
|              |            |           |             |                        |             | 47.4            | 469.9875      | 0.03                                 | 0.31      | 8.4                 | 0.18       | 14.9                 |

**Table D.1 (Continued)****MPE assessment for APX6500 UHF R1 - roof mounted antenna – Bystander**

Note:

Blue fonts: Frequencies not regulated by FCC.

| Trunk / Roof | Test Post. | E/H Field | Antenna No. | Antenna Model            | Max Pwr (W) | Initial Pwr (W) | Tx Freq (MHz) | Max Calc. P.D. (mW/cm <sup>2</sup> ) | FCC Limit | % To FCC Spec Limit | ISED Limit | % To ISED Spec Limit |
|--------------|------------|-----------|-------------|--------------------------|-------------|-----------------|---------------|--------------------------------------|-----------|---------------------|------------|----------------------|
| Roof         | BS3        | E         | 9           | HAE6031A, 380-520MHz     | 48          | 47.6            | 380.0125      | 0.02                                 | 0.25      | 6.8                 | 0.15       | 11.4                 |
|              |            |           |             |                          |             | 47.6            | 393.0125      | 0.02                                 | 0.26      | 7.8                 | 0.16       | 13.2                 |
|              |            |           |             |                          |             | 47.1            | 406.5000      | 0.03                                 | 0.27      | 10.3                | 0.16       | 17.5                 |
|              |            |           |             |                          |             | 47.3            | 422.0125      | 0.02                                 | 0.28      | 7.2                 | 0.16       | 12.5                 |
|              |            |           |             |                          |             | 46.7            | 438.0125      | 0.02                                 | 0.29      | 6.3                 | 0.17       | 10.9                 |
|              |            |           |             |                          |             | 46.8            | 450.0125      | 0.02                                 | 0.3       | 6.9                 | 0.17       | 12.1                 |
|              |            |           |             |                          |             | 47.4            | 469.9875      | 0.02                                 | 0.31      | 5.7                 | 0.18       | 10.2                 |
| Roof         | BS4        | E         | 9           | HAE6031A, 380-520MHz     | 48          | 47.6            | 380.0125      | 0.01                                 | 0.25      | 4.7                 | 0.15       | 7.8                  |
|              |            |           |             |                          |             | 47.6            | 393.0125      | 0.01                                 | 0.26      | 4.7                 | 0.16       | 8                    |
|              |            |           |             |                          |             | 47.1            | 406.5000      | 0.01                                 | 0.27      | 4.6                 | 0.16       | 7.8                  |
|              |            |           |             |                          |             | 47.3            | 422.0125      | 0.02                                 | 0.28      | 5.4                 | 0.16       | 9.4                  |
|              |            |           |             |                          |             | 46.7            | 438.0125      | 0.01                                 | 0.29      | 3.9                 | 0.17       | 6.9                  |
|              |            |           |             |                          |             | 46.8            | 450.0125      | 0.01                                 | 0.3       | 4.6                 | 0.17       | 8.1                  |
|              |            |           |             |                          |             | 47.4            | 469.9875      | 0.02                                 | 0.31      | 4.8                 | 0.18       | 8.6                  |
| Roof         | BS5        | E         | 9           | HAE6031A, 380-520MHz     | 48          | 47.6            | 380.0125      | 0.00                                 | 0.25      | 1.4                 | 0.15       | 2.3                  |
|              |            |           |             |                          |             | 47.6            | 393.0125      | 0.01                                 | 0.26      | 2.3                 | 0.16       | 3.9                  |
|              |            |           |             |                          |             | 47.1            | 406.5000      | 0.01                                 | 0.27      | 3.4                 | 0.16       | 5.8                  |
|              |            |           |             |                          |             | 47.3            | 422.0125      | 0.01                                 | 0.28      | 3.9                 | 0.16       | 6.7                  |
|              |            |           |             |                          |             | 46.7            | 438.0125      | 0.01                                 | 0.29      | 3.8                 | 0.17       | 6.6                  |
|              |            |           |             |                          |             | 46.8            | 450.0125      | 0.01                                 | 0.3       | 3.5                 | 0.17       | 6.1                  |
|              |            |           |             |                          |             | 47.4            | 469.9875      | 0.01                                 | 0.31      | 2.4                 | 0.18       | 4.2                  |
| Roof         | BS1        | E         | 10          | RAE4014ARB, 445 - 470MHz | 48          | 46.8            | 450.0125      | 0.02                                 | 0.3       | 7.2                 | 0.17       | 12.7                 |
|              |            |           |             |                          |             | 47.0            | 460.0000      | 0.02                                 | 0.31      | 7.9                 | 0.17       | 14                   |
|              |            |           |             |                          |             | 47.4            | 469.9875      | 0.02                                 | 0.31      | 6.6                 | 0.18       | 11.8                 |
| Roof         | BS2        | E         | 10          | RAE4014ARB, 445 - 470MHz | 48          | 46.8            | 450.0125      | 0.02                                 | 0.3       | 5.6                 | 0.17       | 9.8                  |
|              |            |           |             |                          |             | 47.0            | 460.0000      | 0.03                                 | 0.31      | 8.6                 | 0.17       | 15.2                 |
|              |            |           |             |                          |             | 47.4            | 469.9875      | 0.02                                 | 0.31      | 6.3                 | 0.18       | 11.3                 |

**Table D.1 (Continued)****MPE assessment for APX6500 UHF R1 - roof mounted antenna – Bystander**

Note:

Blue fonts: Frequencies not regulated by FCC.

| Trunk / Roof | Test Post. | E/H Field | Antenna No. | Antenna Model            | Max Pwr (W) | Initial Pwr (W) | Tx Freq (MHz) | Max Calc. P.D. (mW/cm <sup>2</sup> ) | FCC Limit | % To FCC Spec Limit | ISED Limit | % To ISED Spec Limit |
|--------------|------------|-----------|-------------|--------------------------|-------------|-----------------|---------------|--------------------------------------|-----------|---------------------|------------|----------------------|
| Roof         | BS3        | E         | 10          | RAE4014ARB, 445 - 470MHz | 48          | 46.8            | 450.0125      | 0.01                                 | 0.3       | 3.3                 | 0.17       | 5.8                  |
|              |            |           |             |                          |             | 47.0            | 460.0000      | 0.01                                 | 0.31      | 4.3                 | 0.17       | 7.6                  |
|              |            |           |             |                          |             | 47.4            | 469.9875      | 0.01                                 | 0.31      | 4.2                 | 0.18       | 7.5                  |
| Roof         | BS4        | E         | 10          | RAE4014ARB, 445 - 470MHz | 48          | 46.8            | 450.0125      | 0.01                                 | 0.3       | 2.7                 | 0.17       | 4.7                  |
|              |            |           |             |                          |             | 47.0            | 460.0000      | 0.01                                 | 0.31      | 4.2                 | 0.17       | 7.4                  |
|              |            |           |             |                          |             | 47.4            | 469.9875      | 0.02                                 | 0.31      | 5.1                 | 0.18       | 9.2                  |
| Roof         | BS5        | E         | 10          | RAE4014ARB, 445 - 470MHz | 48          | 46.8            | 450.0125      | 0.01                                 | 0.3       | 3.3                 | 0.17       | 5.7                  |
|              |            |           |             |                          |             | 47.0            | 460.0000      | 0.01                                 | 0.31      | 2.8                 | 0.17       | 5                    |
|              |            |           |             |                          |             | 47.4            | 469.9875      | 0.01                                 | 0.31      | 3.8                 | 0.18       | 6.8                  |

**Table D.2****MPE assessment for APX6500 UHF R1 - roof mounted antenna – Passenger Back**

Note:

Blue fonts: Frequencies not regulated by FCC.

| Trunk/<br>Roof | Test<br>Position | E/H<br>Field | Antenna No. | Antenna<br>Model                           | Max<br>Pwr<br>(W) | Initial<br>Pwr<br>(W) | Tx Freq<br>(MHz) | Max<br>Calc.<br>P.D.<br>(mW/<br>cm <sup>2</sup> ) | FCC<br>Limit | % To<br>FCC<br>Spec<br>Limit | ISED<br>Limit | % To<br>ISED<br>Spec<br>Limit |
|----------------|------------------|--------------|-------------|--------------------------------------------|-------------------|-----------------------|------------------|---------------------------------------------------|--------------|------------------------------|---------------|-------------------------------|
| Roof           | PB               | E            | 1           | HAE4003A,<br>1/4 Wave,<br>(450-470MHz)     | 48                | 46.8                  | 450.0125         | 0.05                                              | 0.30         | 15.6                         | 0.17          | 27.4                          |
|                |                  |              |             |                                            |                   | 47                    | 460.0000         | 0.03                                              | 0.31         | 10.2                         | 0.17          | 18.1                          |
|                |                  |              |             |                                            |                   | 47.4                  | 469.9875         | 0.03                                              | 0.31         | 9.9                          | 0.18          | 17.7                          |
|                |                  |              |             |                                            |                   |                       |                  |                                                   |              |                              |               |                               |
|                |                  |              | 2           | HAE4011A,<br>5/8 Wave,<br>(450-470MHz)     | 48                | 46.8                  | 450.0125         | 0.01                                              | 0.30         | 3.4                          | 0.17          | 5.9                           |
|                |                  |              |             |                                            |                   | 47                    | 460.0000         | 0.01                                              | 0.31         | 2.4                          | 0.17          | 4.2                           |
|                |                  |              |             |                                            |                   | 47.4                  | 469.9875         | 0.01                                              | 0.31         | 2.4                          | 0.18          | 4.2                           |
|                |                  |              |             |                                            |                   |                       |                  |                                                   |              |                              |               |                               |
|                |                  |              | 3           | HAE6010A,<br>5/8 Wave,<br>(380-<br>433MHz) | 48                | 47.6                  | 380.0125         | 0.05                                              | 0.25         | 20.2                         | 0.15          | 33.7                          |
|                |                  |              |             |                                            |                   | 47.6                  | 393.0125         | 0.05                                              | 0.26         | 17.9                         | 0.16          | 30.3                          |
|                |                  |              |             |                                            |                   | 47.1                  | 406.5000         | 0.04                                              | 0.27         | 15.3                         | 0.16          | 26.1                          |
|                |                  |              |             |                                            |                   | 47.4                  | 419.5000         | 0.04                                              | 0.28         | 12.8                         | 0.16          | 22.0                          |
|                |                  |              |             |                                            |                   | 46.6                  | 432.9875         | 0.03                                              | 0.29         | 10.2                         | 0.17          | 17.8                          |
|                |                  |              |             |                                            |                   |                       |                  |                                                   |              |                              |               |                               |
|                |                  |              | 4           | HAE6011A,<br>5/8 Wave,<br>(380-<br>433MHz) | 48                | 47.6                  | 380.0125         | 0.01                                              | 0.25         | 3.3                          | 0.15          | 5.4                           |
|                |                  |              |             |                                            |                   | 47.6                  | 393.0125         | 0.00                                              | 0.26         | 1.7                          | 0.16          | 2.9                           |
|                |                  |              |             |                                            |                   | 47.1                  | 406.5000         | 0.01                                              | 0.27         | 3.6                          | 0.16          | 6.2                           |
|                |                  |              |             |                                            |                   | 47.4                  | 419.5000         | 0.01                                              | 0.28         | 2.6                          | 0.16          | 4.6                           |
|                |                  |              |             |                                            |                   | 46.6                  | 432.9875         | 0.00                                              | 0.29         | 1.1                          | 0.17          | 1.8                           |
|                |                  |              |             |                                            |                   |                       |                  |                                                   |              |                              |               |                               |
|                |                  |              | 5           | HAE6012A,<br>1/4 Wave,<br>(380-<br>433MHz) | 48                | 47.6                  | 380.0125         | 0.08                                              | 0.25         | 32.3                         | 0.15          | 54.0                          |
|                |                  |              |             |                                            |                   | 47.6                  | 393.0125         | 0.04                                              | 0.26         | 13.5                         | 0.16          | 22.8                          |
|                |                  |              |             |                                            |                   | 47.1                  | 406.5000         | 0.04                                              | 0.27         | 15.3                         | 0.16          | 26.1                          |
|                |                  |              |             |                                            |                   | 47.4                  | 419.5000         | 0.03                                              | 0.28         | 10.5                         | 0.16          | 18.0                          |
|                |                  |              |             |                                            |                   | 46.6                  | 432.9875         | 0.02                                              | 0.29         | 8.4                          | 0.17          | 14.5                          |
|                |                  |              |             |                                            |                   |                       |                  |                                                   |              |                              |               |                               |
|                |                  |              | 6           | HAE6013A,<br>1/2 Wave,<br>(380-<br>470MHz) | 48                | 47.6                  | 380.0125         | 0.08                                              | 0.25         | 30.7                         | 0.15          | 51.2                          |
|                |                  |              |             |                                            |                   | 47.6                  | 393.0125         | 0.03                                              | 0.26         | 10.8                         | 0.16          | 18.1                          |
|                |                  |              |             |                                            |                   | 47.1                  | 406.5000         | 0.05                                              | 0.27         | 16.9                         | 0.16          | 28.8                          |
|                |                  |              |             |                                            |                   | 47.3                  | 422.0125         | 0.02                                              | 0.28         | 8.8                          | 0.16          | 15.3                          |
|                |                  |              |             |                                            |                   | 46.7                  | 438.0125         | 0.04                                              | 0.29         | 12.2                         | 0.17          | 21.4                          |
|                |                  |              |             |                                            |                   | 46.8                  | 450.0125         | 0.05                                              | 0.30         | 17.1                         | 0.17          | 30.2                          |
|                |                  |              |             |                                            |                   | 47.4                  | 469.9875         | 0.04                                              | 0.31         | 11.4                         | 0.18          | 20.3                          |
|                |                  |              |             |                                            |                   |                       |                  |                                                   |              |                              |               |                               |
|                |                  |              | 7           | HAE6015A,<br>1/2 Wave,<br>(450-<br>520MHz) | 48                | 46.8                  | 450.0125         | 0.05                                              | 0.30         | 16.6                         | 0.17          | 29.3                          |
|                |                  |              |             |                                            |                   | 47                    | 460.0000         | 0.04                                              | 0.31         | 13.3                         | 0.17          | 23.5                          |
|                |                  |              |             |                                            |                   | 47.4                  | 469.9875         | 0.03                                              | 0.31         | 10.0                         | 0.18          | 17.9                          |
|                |                  |              |             |                                            |                   |                       |                  |                                                   |              |                              |               |                               |
|                |                  |              | 8           | HAE6016A,<br>1/4 Wave,<br>(450-<br>512MHz) | 48                | 46.8                  | 450.0125         | 0.03                                              | 0.30         | 11.5                         | 0.17          | 20.2                          |
|                |                  |              |             |                                            |                   | 47                    | 460.0000         | 0.032                                             | 0.31         | 10.6                         | 0.17          | 18.8                          |
|                |                  |              |             |                                            |                   | 47.4                  | 469.9875         | 0.03                                              | 0.31         | 8.0                          | 0.18          | 14.3                          |

**Table D.2 (Continued)****MPE assessment for APX6500 UHF R1 - roof mounted antenna – Passenger Back**

Note:

Blue fonts: Frequencies not regulated by FCC.

| Trunk/<br>Roof | Test<br>Position | E/H<br>Field | Antenna No. | Antenna<br>Model                         | Max<br>Pwr<br>(W) | Initial<br>Pwr<br>(W) | Tx Freq<br>(MHz) | Max<br>Calc.<br>P.D.<br>(mW/<br>cm <sup>2</sup> ) | FCC<br>Limit | % To<br>FCC<br>Spec<br>Limit | ISED<br>Limit | % To<br>ISED<br>Spec<br>Limit |
|----------------|------------------|--------------|-------------|------------------------------------------|-------------------|-----------------------|------------------|---------------------------------------------------|--------------|------------------------------|---------------|-------------------------------|
| Roof           | PB               | E            | 9           | HAE6031A,<br>1/2 Wave, (380-<br>520MHz)  | 48                | 47.6                  | 380.0125         | 0.05                                              | 0.25         | 21.3                         | 0.15          | 35.6                          |
|                |                  |              |             |                                          |                   | 47.6                  | 393.0125         | 0.03                                              | 0.26         | 11.8                         | 0.16          | 19.9                          |
|                |                  |              |             |                                          |                   | 47.1                  | 406.5000         | 0.04                                              | 0.27         | 13.9                         | 0.16          | 23.7                          |
|                |                  |              |             |                                          |                   | 47.3                  | 422.0125         | 0.03                                              | 0.28         | 10.8                         | 0.16          | 18.6                          |
|                |                  |              |             |                                          |                   | 46.7                  | 438.0125         | 0.03                                              | 0.29         | 10.6                         | 0.17          | 18.5                          |
|                |                  |              |             |                                          |                   | 46.8                  | 450.0125         | 0.04                                              | 0.30         | 14.1                         | 0.17          | 24.9                          |
|                |                  |              |             |                                          |                   | 47.4                  | 469.9875         | 0.03                                              | 0.31         | 9.7                          | 0.18          | 17.4                          |
|                |                  |              |             |                                          |                   |                       |                  |                                                   |              |                              |               |                               |
|                |                  |              | 10          | RAE4014ARB,<br>5/8 Wave,<br>(445-470MHz) | 48                | 46.8                  | 450.0125         | 0.01                                              | 0.30         | 2.1                          | 0.17          | 3.7                           |
|                |                  |              |             |                                          |                   | 47                    | 460.0000         | 0.01                                              | 0.31         | 1.8                          | 0.17          | 3.3                           |
|                |                  |              |             |                                          |                   | 47.4                  | 469.9875         | 0.01                                              | 0.31         | 2.2                          | 0.18          | 3.9                           |

**Table D.2 (Continued)****MPE assessment for APX6500 UHF R1 - roof mounted antenna – Passenger Front**

Note:

Blue fonts: Frequencies not regulated by FCC.

| Trunk/<br>Roof | Test<br>Position | E/H<br>Field | Antenna No. | Antenna<br>Model                           | Max<br>Pwr<br>(W) | Initial<br>Pwr<br>(W) | Tx Freq<br>(MHz) | Max<br>Calc.<br>P.D.<br>(mW/<br>cm <sup>2</sup> ) | FCC<br>Limit | % To<br>FCC<br>Spec<br>Limit | ISED<br>Limit | % To<br>ISED<br>Spec<br>Limit |
|----------------|------------------|--------------|-------------|--------------------------------------------|-------------------|-----------------------|------------------|---------------------------------------------------|--------------|------------------------------|---------------|-------------------------------|
| Roof           | PF               | E            | 1           | HAE4003A,<br>1/4 Wave,<br>(450-470MHz)     | 48                | 46.8                  | 450.0125         | 0.02                                              | 0.30         | 6.2                          | 0.17          | 10.9                          |
|                |                  |              |             |                                            |                   | 47                    | 460.0000         | 0.02                                              | 0.31         | 6.1                          | 0.17          | 10.8                          |
|                |                  |              |             |                                            |                   | 47.4                  | 469.9875         | 0.03                                              | 0.31         | 8.3                          | 0.18          | 14.9                          |
|                |                  |              |             |                                            |                   |                       |                  |                                                   |              |                              |               |                               |
|                |                  |              | 2           | HAE4011A,<br>5/8 Wave,<br>(450-470MHz)     | 48                | 46.8                  | 450.0125         | 0.01                                              | 0.30         | 2.1                          | 0.17          | 3.6                           |
|                |                  |              |             |                                            |                   | 47                    | 460.0000         | 0.01                                              | 0.31         | 1.7                          | 0.17          | 3.1                           |
|                |                  |              |             |                                            |                   | 47.4                  | 469.9875         | 0.01                                              | 0.31         | 1.7                          | 0.18          | 3.1                           |
|                |                  |              |             |                                            |                   |                       |                  |                                                   |              |                              |               |                               |
|                |                  |              | 3           | HAE6010A,<br>5/8 Wave,<br>(380-<br>433MHz) | 48                | 47.6                  | 380.0125         | 0.03                                              | 0.25         | 11.5                         | 0.15          | 19.2                          |
|                |                  |              |             |                                            |                   | 47.6                  | 393.0125         | 0.03                                              | 0.26         | 13.0                         | 0.16          | 21.9                          |
|                |                  |              |             |                                            |                   | 47.1                  | 406.5000         | 0.06                                              | 0.27         | 21.2                         | 0.16          | 36.2                          |
|                |                  |              |             |                                            |                   | 47.4                  | 419.5000         | 0.04                                              | 0.28         | 13.4                         | 0.16          | 23.0                          |
|                |                  |              |             |                                            |                   | 46.6                  | 432.9875         | 0.02                                              | 0.29         | 6.6                          | 0.17          | 11.4                          |
|                |                  |              |             |                                            |                   |                       |                  |                                                   |              |                              |               |                               |
|                |                  |              | 4           | HAE6011A,<br>5/8 Wave,<br>(380-<br>433MHz) | 48                | 47.6                  | 380.0125         | 0.00                                              | 0.25         | 1.2                          | 0.15          | 1.9                           |
|                |                  |              |             |                                            |                   | 47.6                  | 393.0125         | 0.01                                              | 0.26         | 2.3                          | 0.16          | 3.8                           |
|                |                  |              |             |                                            |                   | 47.1                  | 406.5000         | 0.01                                              | 0.27         | 3.5                          | 0.16          | 6.1                           |
|                |                  |              |             |                                            |                   | 47.4                  | 419.5000         | 0.00                                              | 0.28         | 1.2                          | 0.16          | 2.1                           |
|                |                  |              |             |                                            |                   | 46.6                  | 432.9875         | 0.00                                              | 0.29         | 0.6                          | 0.17          | 1.1                           |
|                |                  |              |             |                                            |                   |                       |                  |                                                   |              |                              |               |                               |
|                |                  |              | 5           | HAE6012A,<br>1/4 Wave,<br>(380-<br>433MHz) | 48                | 47.6                  | 380.0125         | 0.03                                              | 0.25         | 10.0                         | 0.15          | 16.7                          |
|                |                  |              |             |                                            |                   | 47.6                  | 393.0125         | 0.03                                              | 0.26         | 12.6                         | 0.16          | 21.3                          |
|                |                  |              |             |                                            |                   | 47.1                  | 406.5000         | 0.05                                              | 0.27         | 16.8                         | 0.16          | 28.7                          |
|                |                  |              |             |                                            |                   | 47.4                  | 419.5000         | 0.03                                              | 0.28         | 10.0                         | 0.16          | 17.2                          |
|                |                  |              |             |                                            |                   | 46.6                  | 432.9875         | 0.02                                              | 0.29         | 5.6                          | 0.17          | 9.7                           |
|                |                  |              |             |                                            |                   |                       |                  |                                                   |              |                              |               |                               |
|                |                  |              | 6           | HAE6013A,<br>1/2 Wave,<br>(380-<br>470MHz) | 48                | 47.6                  | 380.0125         | 0.02                                              | 0.25         | 9.5                          | 0.15          | 15.8                          |
|                |                  |              |             |                                            |                   | 47.6                  | 393.0125         | 0.03                                              | 0.26         | 9.9                          | 0.16          | 16.7                          |
|                |                  |              |             |                                            |                   | 47.1                  | 406.5000         | 0.05                                              | 0.27         | 17.3                         | 0.16          | 29.5                          |
|                |                  |              |             |                                            |                   | 47.3                  | 422.0125         | 0.03                                              | 0.28         | 9.5                          | 0.16          | 16.4                          |
|                |                  |              |             |                                            |                   | 46.7                  | 438.0125         | 0.02                                              | 0.29         | 5.6                          | 0.17          | 9.7                           |
|                |                  |              |             |                                            |                   | 46.8                  | 450.0125         | 0.02                                              | 0.30         | 7.3                          | 0.17          | 12.8                          |
|                |                  |              |             |                                            |                   | 47.4                  | 469.9875         | 0.03                                              | 0.31         | 8.0                          | 0.18          | 14.3                          |
|                |                  |              |             |                                            |                   |                       |                  |                                                   |              |                              |               |                               |
|                |                  |              | 7           | HAE6015A,<br>1/2 Wave,<br>(450-<br>520MHz) | 48                | 46.8                  | 450.0125         | 0.02                                              | 0.30         | 6.2                          | 0.17          | 10.8                          |
|                |                  |              |             |                                            |                   | 47                    | 460.0000         | 0.02                                              | 0.31         | 7.5                          | 0.17          | 13.3                          |
|                |                  |              |             |                                            |                   | 47.4                  | 469.9875         | 0.03                                              | 0.31         | 8.1                          | 0.18          | 14.5                          |
|                |                  |              |             |                                            |                   |                       |                  |                                                   |              |                              |               |                               |
|                |                  |              | 8           | HAE6016A,<br>1/4 Wave,<br>(450-<br>512MHz) | 48                | 46.8                  | 450.0125         | 0.30                                              | 5.5          | 0.23                         | 9.7           | 0.02                          |
|                |                  |              |             |                                            |                   | 47                    | 460.0000         | 0.31                                              | 6.1          | 0.23                         | 10.9          | 0.02                          |
|                |                  |              |             |                                            |                   | 47.4                  | 469.9875         | 0.31                                              | 6.3          | 0.23                         | 11.2          | 0.02                          |

**Table D.2 (Continued)****MPE assessment for APX6500 UHF R1 - roof mounted antenna – Passenger Front**

Note:

Blue fonts: Frequencies not regulated by FCC.

| Trunk/<br>Roof | Test<br>Position | E/H<br>Field | Antenna No. | Antenna<br>Model                        | Max<br>Pwr<br>(W) | Initial<br>Pwr<br>(W) | Tx Freq<br>(MHz) | Max<br>Calc.<br>P.D.<br>(mW/<br>cm <sup>2</sup> ) | FCC<br>Limit | % To<br>FCC<br>Spec<br>Limit | ISED<br>Limit | % To<br>ISED<br>Spec<br>Limit |
|----------------|------------------|--------------|-------------|-----------------------------------------|-------------------|-----------------------|------------------|---------------------------------------------------|--------------|------------------------------|---------------|-------------------------------|
| Roof           | PF               | E            | 9           | HAE6031A,<br>1/2 Wave, (380-<br>520MHz) | 48                | 47.6                  | 380.0125         | 0.03                                              | 0.25         | 11.4                         | 0.15          | 19.0                          |
|                |                  |              |             |                                         |                   | 47.6                  | 393.0125         | 0.03                                              | 0.26         | 13.2                         | 0.16          | 22.2                          |
|                |                  |              |             |                                         |                   | 47.1                  | 406.5000         | 0.05                                              | 0.27         | 17.3                         | 0.16          | 29.4                          |
|                |                  |              |             |                                         |                   | 47.3                  | 422.0125         | 0.03                                              | 0.28         | 10.8                         | 0.16          | 18.6                          |
|                |                  |              |             |                                         |                   | 46.7                  | 438.0125         | 0.02                                              | 0.29         | 5.4                          | 0.17          | 9.4                           |
|                |                  |              |             |                                         |                   | 46.8                  | 450.0125         | 0.03                                              | 0.30         | 8.8                          | 0.17          | 15.5                          |
|                |                  |              |             |                                         |                   | 47.4                  | 469.9875         | 0.03                                              | 0.31         | 9.3                          | 0.18          | 16.6                          |
|                |                  |              |             |                                         |                   |                       |                  |                                                   |              |                              |               |                               |
|                |                  |              | 10          | RAE4014ARB<br>5/8 Wave,<br>(445-470MHz) | 48                | 46.8                  | 450.0125         | 0.00                                              | 0.30         | 0.6                          | 0.17          | 1.0                           |
|                |                  |              |             |                                         |                   | 47                    | 460.0000         | 0.00                                              | 0.31         | 1.0                          | 0.17          | 1.7                           |
|                |                  |              |             |                                         |                   | 47.4                  | 469.9875         | 0.01                                              | 0.31         | 2.0                          | 0.18          | 3.7                           |



**Table D.3**  
**APX6500 UHF R1 MPE Results for FCC**

Note:

Blue fonts: Frequencies not regulated by FCC.

Pmax (W) 48

Pinitial (W)

FCCLimit (mW/cm<sup>2</sup>)

|      |      |      |      |      |      |      |      |      |      |
|------|------|------|------|------|------|------|------|------|------|
| 47.6 | 47.6 | 47.1 | 47.4 | 47.3 | 46.6 | 46.7 | 46.8 | 47   | 47.4 |
| 0.25 | 0.26 | 0.27 | 0.28 | 0.28 | 0.29 | 0.29 | 0.30 | 0.31 | 0.31 |

| Table | Test Post. | Trunk / Roof | E/H Field | Antenna No. | F1       | F2       | F3       | F4       | F5       | F6       | F7       | F8       | F9       | F10      |
|-------|------------|--------------|-----------|-------------|----------|----------|----------|----------|----------|----------|----------|----------|----------|----------|
|       |            |              |           |             | 380.0125 | 393.0125 | 406.5000 | 419.5000 | 422.0125 | 432.9875 | 438.0125 | 450.0125 | 460.0000 | 469.9875 |
| D.1   | BS1        | Roof         | E         | 1           |          |          |          |          |          |          |          | 0.03     | 0.03     | 0.03     |
| D.1   | BS2        | Roof         | E         | 1           |          |          |          |          |          |          |          | 0.02     | 0.02     | 0.02     |
| D.1   | BS3        | Roof         | E         | 1           |          |          |          |          |          |          |          | 0.02     | 0.02     | 0.01     |
| D.1   | BS4        | Roof         | E         | 1           |          |          |          |          |          |          |          | 0.01     | 0.01     | 0.01     |
| D.1   | BS5        | Roof         | E         | 1           |          |          |          |          |          |          |          | 0.01     | 0.01     | 0.01     |
|       |            |              |           |             |          |          |          |          |          |          |          |          |          |          |
| D.1   | BS1        | Roof         | E         | 2           |          |          |          |          |          |          |          | 0.02     | 0.02     | 0.02     |
| D.1   | BS2        | Roof         | E         | 2           |          |          |          |          |          |          |          | 0.02     | 0.02     | 0.02     |
| D.1   | BS3        | Roof         | E         | 2           |          |          |          |          |          |          |          | 0.01     | 0.01     | 0.01     |
| D.1   | BS4        | Roof         | E         | 2           |          |          |          |          |          |          |          | 0.01     | 0.01     | 0.01     |
| D.1   | BS5        | Roof         | E         | 2           |          |          |          |          |          |          |          | 0.01     | 0.01     | 0.01     |
|       |            |              |           |             |          |          |          |          |          |          |          |          |          |          |
| D.1   | BS1        | Roof         | E         | 3           | 0.01     | 0.01     | 0.01     | 0.01     |          | 0.02     |          |          |          |          |
| D.1   | BS2        | Roof         | E         | 3           | 0.01     | 0.01     | 0.01     | 0.01     |          | 0.01     |          |          |          |          |
| D.1   | BS3        | Roof         | E         | 3           | 0.01     | 0.01     | 0.01     | 0.01     |          | 0.01     |          |          |          |          |
| D.1   | BS4        | Roof         | E         | 3           | 0.00     | 0.01     | 0.01     | 0.01     |          | 0.01     |          |          |          |          |
| D.1   | BS5        | Roof         | E         | 3           | 0.00     | 0.00     | 0.00     | 0.00     |          | 0.00     |          |          |          |          |
|       |            |              |           |             |          |          |          |          |          |          |          |          |          |          |
| D.1   | BS1        | Roof         | E         | 4           | 0.03     | 0.03     | 0.03     | 0.02     |          | 0.01     |          |          |          |          |
| D.1   | BS2        | Roof         | E         | 4           | 0.02     | 0.02     | 0.02     | 0.02     |          | 0.01     |          |          |          |          |
| D.1   | BS3        | Roof         | E         | 4           | 0.02     | 0.02     | 0.03     | 0.01     |          | 0.01     |          |          |          |          |
| D.1   | BS4        | Roof         | E         | 4           | 0.01     | 0.02     | 0.01     | 0.01     |          | 0.01     |          |          |          |          |
| D.1   | BS5        | Roof         | E         | 4           | 0.01     | 0.01     | 0.01     | 0.01     |          | 0.01     |          |          |          |          |
|       |            |              |           |             |          |          |          |          |          |          |          |          |          |          |
| D.1   | BS1        | Roof         | E         | 5           | 0.04     | 0.03     | 0.03     | 0.03     |          | 0.02     |          |          |          |          |
| D.1   | BS2        | Roof         | E         | 5           | 0.03     | 0.02     | 0.02     | 0.02     |          | 0.02     |          |          |          |          |
| D.1   | BS3        | Roof         | E         | 5           | 0.02     | 0.02     | 0.02     | 0.02     |          | 0.02     |          |          |          |          |
| D.1   | BS4        | Roof         | E         | 5           | 0.01     | 0.01     | 0.01     | 0.01     |          | 0.01     |          |          |          |          |
| D.1   | BS5        | Roof         | E         | 5           | 0.01     | 0.01     | 0.01     | 0.01     |          | 0.01     |          |          |          |          |
|       |            |              |           |             |          |          |          |          |          |          |          |          |          |          |
| D.1   | BS1        | Roof         | E         | 6           | 0.03     | 0.03     | 0.03     |          | 0.03     |          | 0.03     | 0.03     |          | 0.02     |
| D.1   | BS2        | Roof         | E         | 6           | 0.02     | 0.02     | 0.02     |          | 0.02     |          | 0.03     | 0.02     |          | 0.02     |
| D.1   | BS3        | Roof         | E         | 6           | 0.02     | 0.02     | 0.03     |          | 0.02     |          | 0.02     | 0.02     |          | 0.02     |
| D.1   | BS4        | Roof         | E         | 6           | 0.01     | 0.01     | 0.01     |          | 0.02     |          | 0.01     | 0.01     |          | 0.01     |
| D.1   | BS5        | Roof         | E         | 6           | 0.00     | 0.01     | 0.01     |          | 0.01     |          | 0.01     | 0.01     |          | 0.01     |
|       |            |              |           |             |          |          |          |          |          |          |          |          |          |          |
| D.1   | BS1        | Roof         | E         | 7           |          |          |          |          |          |          |          | 0.03     | 0.03     | 0.03     |
| D.1   | BS2        | Roof         | E         | 7           |          |          |          |          |          |          |          | 0.03     | 0.03     | 0.02     |
| D.1   | BS3        | Roof         | E         | 7           |          |          |          |          |          |          |          | 0.02     | 0.02     | 0.02     |
| D.1   | BS4        | Roof         | E         | 7           |          |          |          |          |          |          |          | 0.01     | 0.01     | 0.01     |
| D.1   | BS5        | Roof         | E         | 7           |          |          |          |          |          |          |          | 0.01     | 0.01     | 0.01     |

**Table D.3 (Continued)**  
**APX6500 UHF R1 MPE Results for FCC**

Note:

Blue fonts: Frequencies not regulated by FCC.

Pmax (W) 48

Pinitial (W)

FCCLimit (mW/cm<sup>2</sup>)

|      |      |      |      |      |      |      |      |      |      |
|------|------|------|------|------|------|------|------|------|------|
| 47.6 | 47.6 | 47.1 | 47.4 | 47.3 | 46.6 | 46.7 | 46.8 | 47   | 47.4 |
| 0.25 | 0.26 | 0.27 | 0.28 | 0.28 | 0.29 | 0.29 | 0.30 | 0.31 | 0.31 |

| Table | Test Post. | Trunk / Roof | E/H Field | Antenna No. | F1       | F2       | F3       | F4       | F5       | F6       | F7       | F8       | F9       | F10      |
|-------|------------|--------------|-----------|-------------|----------|----------|----------|----------|----------|----------|----------|----------|----------|----------|
|       |            |              |           |             | 380.0125 | 393.0125 | 406.5000 | 419.5000 | 422.0125 | 432.9875 | 438.0125 | 450.0125 | 460.0000 | 469.9875 |
| D.1   | BS1        | Roof         | E         | 8           |          |          |          |          |          |          |          | 0.02     | 0.02     | 0.02     |
| D.1   | BS2        | Roof         | E         | 8           |          |          |          |          |          |          |          | 0.02     | 0.02     | 0.02     |
| D.1   | BS3        | Roof         | E         | 8           |          |          |          |          |          |          |          | 0.01     | 0.01     | 0.01     |
| D.1   | BS4        | Roof         | E         | 8           |          |          |          |          |          |          |          | 0.01     | 0.01     | 0.01     |
| D.1   | BS5        | Roof         | E         | 8           |          |          |          |          |          |          |          | 0.01     | 0.01     | 0.01     |
|       |            |              |           |             |          |          |          |          |          |          |          |          |          |          |
| D.1   | BS1        | Roof         | E         | 9           | 0.04     | 0.03     | 0.03     |          | 0.03     |          | 0.03     | 0.03     |          | 0.03     |
| D.1   | BS2        | Roof         | E         | 9           | 0.03     | 0.02     | 0.02     |          | 0.02     |          | 0.03     | 0.03     |          | 0.03     |
| D.1   | BS3        | Roof         | E         | 9           | 0.02     | 0.02     | 0.03     |          | 0.02     |          | 0.02     | 0.02     |          | 0.02     |
| D.1   | BS4        | Roof         | E         | 9           | 0.01     | 0.01     | 0.01     |          | 0.02     |          | 0.01     | 0.01     |          | 0.02     |
| D.1   | BS5        | Roof         | E         | 9           | 0        | 0.01     | 0.01     |          | 0.01     |          | 0.01     | 0.01     |          | 0.01     |
|       |            |              |           |             |          |          |          |          |          |          |          |          |          |          |
| D.1   | BS1        | Roof         | E         | 10          |          |          |          |          |          |          |          | 0.02     | 0.02     | 0.02     |
| D.1   | BS2        | Roof         | E         | 10          |          |          |          |          |          |          |          | 0.02     | 0.03     | 0.02     |
| D.1   | BS3        | Roof         | E         | 10          |          |          |          |          |          |          |          | 0.01     | 0.01     | 0.01     |
| D.1   | BS4        | Roof         | E         | 10          |          |          |          |          |          |          |          | 0.01     | 0.01     | 0.02     |
| D.1   | BS5        | Roof         | E         | 10          |          |          |          |          |          |          |          | 0.01     | 0.01     | 0.01     |
|       |            |              |           |             |          |          |          |          |          |          |          |          |          |          |
| D.2   | PB         | Roof         | E         | 1           |          |          |          |          |          |          |          | 0.05     | 0.03     | 0.03     |
| D.2   | PB         | Roof         | E         | 2           |          |          |          |          |          |          |          | 0.01     | 0.01     | 0.01     |
| D.2   | PB         | Roof         | E         | 3           | 0.05     | 0.05     | 0.04     | 0.04     |          | 0.03     |          |          |          |          |
| D.2   | PB         | Roof         | E         | 4           | 0.01     | 0.00     | 0.01     | 0.01     |          | 0.00     |          |          |          |          |
| D.2   | PB         | Roof         | E         | 5           | 0.08     | 0.04     | 0.04     | 0.03     |          | 0.02     |          |          |          |          |
| D.2   | PB         | Roof         | E         | 6           | 0.08     | 0.03     | 0.05     |          | 0.02     |          | 0.04     | 0.05     |          | 0.04     |
| D.2   | PB         | Roof         | E         | 7           |          |          |          |          |          |          |          | 0.05     | 0.04     | 0.03     |
| D.2   | PB         | Roof         | E         | 8           |          |          |          |          |          |          |          | 0.03     | 0.03     | 0.03     |
| D.2   | PB         | Roof         | E         | 9           | 0.05     | 0.03     | 0.04     |          | 0.03     |          | 0.03     | 0.04     |          | 0.03     |
| D.2   | PB         | Roof         | E         | 10          |          |          |          |          |          |          |          | 0.01     | 0.01     | 0.01     |
|       |            |              |           |             |          |          |          |          |          |          |          |          |          |          |
| D.2   | PF         | Roof         | E         | 1           |          |          |          |          |          |          |          | 0.02     | 0.02     | 0.03     |
| D.2   | PF         | Roof         | E         | 2           |          |          |          |          |          |          |          | 0.01     | 0.01     | 0.01     |
| D.2   | PF         | Roof         | E         | 3           | 0.03     | 0.03     | 0.06     | 0.04     |          | 0.02     |          |          |          |          |
| D.2   | PF         | Roof         | E         | 4           | 0.00     | 0.01     | 0.01     | 0.00     |          | 0.00     |          |          |          |          |
| D.2   | PF         | Roof         | E         | 5           | 0.03     | 0.03     | 0.05     | 0.03     |          | 0.02     |          |          |          |          |
| D.2   | PF         | Roof         | E         | 6           | 0.02     | 0.03     | 0.05     |          | 0.03     |          | 0.02     | 0.02     |          | 0.03     |
| D.2   | PF         | Roof         | E         | 7           |          |          |          |          |          |          |          | 0.02     | 0.02     | 0.03     |
| D.2   | PF         | Roof         | E         | 8           |          |          |          |          |          |          |          | 0.02     | 0.02     | 0.02     |
| D.2   | PF         | Roof         | E         | 9           | 0.03     | 0.03     | 0.05     |          | 0.03     |          | 0.02     | 0.03     |          | 0.03     |
| D.2   | PF         | Roof         | E         | 10          |          |          |          |          |          |          |          | 0.00     | 0.00     | 0.01     |

## **Appendix E – MPE Test Results Summary for Companion Device (DVR UHF)**

**Table E.1****MPE assessment for DVR UHF - trunk mounted antenna - Bystander**

| Trunk / Roof | Test Post. | E/H Field | Antenna No. | Antenna Model                   | Max Pwr (W) | Initial Pwr (W) | Tx Freq (MHz) | Max Calc. P.D. (mW/cm <sup>2</sup> ) | FCC Limit | % To FCC Spec Limit | ISED Limit | % To ISED Spec Limit |
|--------------|------------|-----------|-------------|---------------------------------|-------------|-----------------|---------------|--------------------------------------|-----------|---------------------|------------|----------------------|
| Trunk        | BS1        | E         | 15          | HAE6012A, 1/4 Wave (380-433MHz) | 10.0        | 9.68            | 406.5000      | 0.005                                | 0.27      | 1.9                 | 0.16       | 3.3                  |
|              |            |           |             |                                 |             | 9.90            | 417.5000      | 0.006                                | 0.28      | 2.1                 | 0.16       | 3.6                  |
|              |            |           |             |                                 |             | 9.60            | 429.9875      | 0.007                                | 0.29      | 2.5                 | 0.17       | 4.4                  |
| Trunk        | BS2        | E         | 15          | HAE6012A, 1/4 Wave (380-433MHz) | 10.0        | 9.68            | 406.5000      | 0.016                                | 0.27      | 5.8                 | 0.16       | 9.8                  |
|              |            |           |             |                                 |             | 9.90            | 417.5000      | 0.015                                | 0.28      | 5.4                 | 0.16       | 9.2                  |
|              |            |           |             |                                 |             | 9.60            | 429.9875      | 0.015                                | 0.29      | 5.2                 | 0.17       | 9.0                  |
| Trunk        | BS3        | E         | 15          | HAE6012A, 1/4 Wave (380-433MHz) | 10.0        | 9.68            | 406.5000      | 0.021                                | 0.27      | 7.9                 | 0.16       | 13.5                 |
|              |            |           |             |                                 |             | 9.90            | 417.5000      | 0.021                                | 0.28      | 7.4                 | 0.16       | 12.8                 |
|              |            |           |             |                                 |             | 9.60            | 429.9875      | 0.026                                | 0.29      | 9.0                 | 0.17       | 15.6                 |
| Trunk        | BS4        | E         | 15          | HAE6012A, 1/4 Wave (380-433MHz) | 10.0        | 9.68            | 406.5000      | 0.041                                | 0.27      | <b>15.2</b>         | 0.16       | 25.9                 |
|              |            |           |             |                                 |             | 9.90            | 417.5000      | 0.039                                | 0.28      | 14.0                | 0.16       | 24.2                 |
|              |            |           |             |                                 |             | 9.60            | 429.9875      | 0.035                                | 0.29      | 12.4                | 0.17       | 21.4                 |
| Trunk        | BS5        | E         | 15          | HAE6012A, 1/4 Wave (380-433MHz) | 10.0        | 9.68            | 406.5000      | 0.036                                | 0.27      | 13.2                | 0.16       | 22.5                 |
|              |            |           |             |                                 |             | 9.90            | 417.5000      | 0.026                                | 0.28      | 9.3                 | 0.16       | 16.0                 |
|              |            |           |             |                                 |             | 9.60            | 429.9875      | 0.023                                | 0.29      | 8.1                 | 0.17       | 14.1                 |
| Trunk        | BS1        | E         | 16          | HAE4003A, 1/4 Wave (450-470MHz) | 10.0        | 9.96            | 450.0000      | 0.005                                | 0.30      | 1.6                 | 0.17       | 2.8                  |
|              |            |           |             |                                 |             | 9.90            | 460.0000      | 0.004                                | 0.31      | 1.2                 | 0.17       | 2.2                  |
|              |            |           |             |                                 |             | 10.00           | 470.0000      | 0.003                                | 0.31      | 0.9                 | 0.18       | 1.5                  |
| Trunk        | BS2        | E         | 16          | HAE4003A, 1/4 Wave (450-470MHz) | 10.0        | 9.96            | 450.0000      | 0.006                                | 0.30      | 2.1                 | 0.17       | 3.8                  |
|              |            |           |             |                                 |             | 9.90            | 460.0000      | 0.007                                | 0.31      | 2.3                 | 0.17       | 4.0                  |
|              |            |           |             |                                 |             | 10.00           | 470.0000      | 0.006                                | 0.31      | 2.0                 | 0.18       | 3.6                  |
| Trunk        | BS3        | E         | 16          | HAE4003A, 1/4 Wave (450-470MHz) | 10.0        | 9.96            | 450.0000      | 0.014                                | 0.30      | 4.6                 | 0.17       | 8.1                  |
|              |            |           |             |                                 |             | 9.90            | 460.0000      | 0.013                                | 0.31      | 4.3                 | 0.17       | 7.6                  |
|              |            |           |             |                                 |             | 10.00           | 470.0000      | 0.014                                | 0.31      | 4.3                 | 0.18       | 7.7                  |
| Trunk        | BS4        | E         | 16          | HAE4003A, 1/4 Wave (450-470MHz) | 10.0        | 9.96            | 450.0000      | 0.022                                | 0.30      | 7.5                 | 0.17       | 13.1                 |
|              |            |           |             |                                 |             | 9.90            | 460.0000      | 0.018                                | 0.31      | 5.9                 | 0.17       | 10.5                 |
|              |            |           |             |                                 |             | 10.00           | 470.0000      | 0.019                                | 0.31      | 6.1                 | 0.18       | 10.9                 |

Note:

Results in bold font are configurations with highest percentage of limits.

**Table E.1 (Continued)**

## MPE assessment for DVR UHF - trunk mounted antenna - Bystander

| Trunk / Roof | Test Post. | E/H Field | Antenna No. | Antenna Model                   | Max Pwr (W) | Initial Pwr (W) | Tx Freq (MHz) | Max Calc. P.D. (mW/cm <sup>2</sup> ) | FCC Limit | % To FCC Spec Limit | ISED Limit | % To ISED Spec Limit |
|--------------|------------|-----------|-------------|---------------------------------|-------------|-----------------|---------------|--------------------------------------|-----------|---------------------|------------|----------------------|
| Trunk        | BS5        | E         | 16          | HAE4003A, 1/4 Wave (450-470MHz) | 10.0        | 9.96            | 450.0000      | 0.014                                | 0.30      | 4.6                 | 0.17       | 8.1                  |
|              |            |           |             |                                 |             | 9.90            | 460.0000      | 0.013                                | 0.31      | 4.3                 | 0.17       | 7.7                  |
|              |            |           |             |                                 |             | 10.00           | 470.0000      | 0.014                                | 0.31      | 4.6                 | 0.18       | 8.1                  |
| Trunk        | BS1        | E         | 17          | HAE4004A, 1/4 Wave (470-512MHz) | 10.0        | 10.00           | 470.0000      | 0.003                                | 0.31      | 0.9                 | 0.18       | 1.6                  |
|              |            |           |             |                                 |             | 9.61            | 484.0000      | 0.003                                | 0.32      | 0.9                 | NA         | NA                   |
|              |            |           |             |                                 |             | 9.83            | 498.0000      | 0.003                                | 0.33      | 0.8                 | NA         | NA                   |
|              |            |           |             |                                 |             | 9.75            | 512.0000      | 0.004                                | 0.34      | 1.0                 | NA         | NA                   |
| Trunk        | BS2        | E         | 17          | HAE4004A, 1/4 Wave (470-512MHz) | 10.0        | 10.00           | 470.0000      | 0.005                                | 0.31      | 1.7                 | 0.18       | 3.1                  |
|              |            |           |             |                                 |             | 9.61            | 484.0000      | 0.007                                | 0.32      | 2.3                 | NA         | NA                   |
|              |            |           |             |                                 |             | 9.83            | 498.0000      | 0.009                                | 0.33      | 2.6                 | NA         | NA                   |
|              |            |           |             |                                 |             | 9.75            | 512.0000      | 0.012                                | 0.34      | 3.6                 | NA         | NA                   |
| Trunk        | BS3        | E         | 17          | HAE4004A, 1/4 Wave (470-512MHz) | 10.0        | 10.00           | 470.0000      | 0.013                                | 0.31      | 4.2                 | 0.18       | 7.5                  |
|              |            |           |             |                                 |             | 9.61            | 484.0000      | 0.014                                | 0.32      | 4.4                 | NA         | NA                   |
|              |            |           |             |                                 |             | 9.83            | 498.0000      | 0.012                                | 0.33      | 3.8                 | NA         | NA                   |
|              |            |           |             |                                 |             | 9.75            | 512.0000      | 0.012                                | 0.34      | 3.6                 | NA         | NA                   |
| Trunk        | BS4        | E         | 17          | HAE4004A, 1/4 Wave (470-512MHz) | 10.0        | 10.00           | 470.0000      | 0.017                                | 0.31      | 5.5                 | 0.18       | 9.7                  |
|              |            |           |             |                                 |             | 9.61            | 484.0000      | 0.019                                | 0.32      | 5.9                 | NA         | NA                   |
|              |            |           |             |                                 |             | 9.83            | 498.0000      | 0.018                                | 0.33      | 5.4                 | NA         | NA                   |
|              |            |           |             |                                 |             | 9.75            | 512.0000      | 0.018                                | 0.34      | 5.3                 | NA         | NA                   |
| Trunk        | BS5        | E         | 17          | HAE4004A, 1/4 Wave (470-512MHz) | 10.0        | 10.00           | 470.0000      | 0.016                                | 0.31      | 5.0                 | 0.18       | 9.0                  |
|              |            |           |             |                                 |             | 9.61            | 484.0000      | 0.018                                | 0.32      | 5.6                 | NA         | NA                   |
|              |            |           |             |                                 |             | 9.83            | 498.0000      | 0.016                                | 0.33      | 4.8                 | NA         | NA                   |
|              |            |           |             |                                 |             | 9.75            | 512.0000      | 0.015                                | 0.34      | 4.3                 | NA         | NA                   |

Note:

Results in bold font are configurations with highest percentage of limits.

**Table E.2****MPE assessment for DVR UHF– trunk mounted antenna - Passenger**

| Trunk / Roof | Test Post. | E/H Field | Antenna No. | Antenna Model                   | Max Pwr (W) | Initial Pwr (W) | Tx Freq (MHz) | Max Calc. P.D. (mW/cm <sup>2</sup> ) | FCC Limit | % To FCC Spec Limit | ISED Limit | % To ISED Spec Limit |
|--------------|------------|-----------|-------------|---------------------------------|-------------|-----------------|---------------|--------------------------------------|-----------|---------------------|------------|----------------------|
| Trunk        | PB         | E         | 15          | HAE6012A, 1/4 Wave (380-433MHz) | 10.0        | 9.68            | 406.5000      | 0.104                                | 0.27      | 38.4                | 0.16       | 65.4                 |
|              |            |           |             |                                 |             | 9.90            | 417.5000      | 0.092                                | 0.28      | 32.9                | 0.16       | 56.6                 |
|              |            |           |             |                                 |             | 9.60            | 429.9875      | 0.065                                | 0.29      | 22.5                | 0.17       | 39.1                 |
| Trunk        | PF         | E         | 15          | HAE6012A, 1/4 Wave (380-433MHz) | 10.0        | 9.68            | 406.5000      | 0.044                                | 0.27      | 16.1                | 0.16       | 27.5                 |
|              |            |           |             |                                 |             | 9.90            | 417.5000      | 0.028                                | 0.28      | 10.2                | 0.16       | 17.5                 |
|              |            |           |             |                                 |             | 9.60            | 429.9875      | 0.035                                | 0.29      | 12.2                | 0.17       | 21.2                 |
| Trunk        | PB         | E         | 16          | HAE4003A, 1/4 Wave (450-470MHz) | 10.0        | 9.96            | 450.0000      | 0.153                                | 0.30      | 51.1                | 0.17       | 90.0                 |
|              |            |           |             |                                 |             | 9.90            | 460.0000      | 0.163                                | 0.31      | <b>53.0</b>         | 0.17       | 94.1                 |
|              |            |           |             |                                 |             | 10.00           | 470.0000      | 0.121                                | 0.31      | 38.5                | 0.18       | 68.7                 |
| Trunk        | PF         | E         | 16          | HAE4003A, 1/4 Wave (450-470MHz) | 10.0        | 9.96            | 450.0000      | 0.038                                | 0.30      | 12.5                | 0.17       | 22.0                 |
|              |            |           |             |                                 |             | 9.90            | 460.0000      | 0.043                                | 0.31      | 14.0                | 0.17       | 24.9                 |
|              |            |           |             |                                 |             | 10.00           | 470.0000      | 0.039                                | 0.31      | 12.5                | 0.18       | 22.3                 |
| Trunk        | PB         | E         | 17          | HAE4004A, 1/4 Wave (470-512MHz) | 10.0        | 10.00           | 470.0000      | 0.136                                | 0.31      | 43.3                | 0.18       | 77.2                 |
|              |            |           |             |                                 |             | 9.61            | 484.0000      | 0.158                                | 0.32      | 49.0                | NA         | NA                   |
|              |            |           |             |                                 |             | 9.83            | 498.0000      | 0.095                                | 0.33      | 28.6                | NA         | NA                   |
|              |            |           |             |                                 |             | 9.75            | 512.0000      | 0.144                                | 0.34      | 42.1                | NA         | NA                   |
| Trunk        | PF         | E         | 17          | HAE4004A, 1/4 Wave (470-512MHz) | 10.0        | 10.00           | 470.0000      | 0.031                                | 0.31      | 9.7                 | 0.18       | 17.4                 |
|              |            |           |             |                                 |             | 9.61            | 484.0000      | 0.028                                | 0.32      | 8.7                 | NA         | NA                   |
|              |            |           |             |                                 |             | 9.83            | 498.0000      | 0.033                                | 0.33      | 10.0                | NA         | NA                   |
|              |            |           |             |                                 |             | 9.75            | 512.0000      | 0.037                                | 0.34      | 10.8                | NA         | NA                   |

Note:

Results in bold font are configurations with highest percentage of limits.

**Table E.3**  
**DVR UHF MPE Results for FCC**

|                 |           |                           |      |      |      |      |      |       |      |      |      |
|-----------------|-----------|---------------------------|------|------|------|------|------|-------|------|------|------|
| <b>Pmax (W)</b> | <b>10</b> | <b>Pinitial (W)</b>       | 9.68 | 9.90 | 9.60 | 9.96 | 9.90 | 10.00 | 9.61 | 9.83 | 9.75 |
|                 |           | <b>FCCLimit (mW/cm^2)</b> | 0.27 | 0.28 | 0.29 | 0.30 | 0.31 | 0.31  | 0.32 | 0.33 | 0.34 |

| Table | Test Post. | Angle | Trunk / Roof | E/H Field | Antenna No. | f3       | f4       | f5       | f6       | f7       | f8       | f9       | f10      | f11      |
|-------|------------|-------|--------------|-----------|-------------|----------|----------|----------|----------|----------|----------|----------|----------|----------|
|       |            |       |              |           |             | 406.5000 | 417.5000 | 429.9875 | 450.0000 | 460.0000 | 470.0000 | 484.0000 | 498.0000 | 512.0000 |
| E.1   | BS1        |       | Trunk        | E         | 15          | 0.005    | 0.006    | 0.007    |          |          |          |          |          |          |
| E.1   | BS2        |       | Trunk        | E         | 15          | 0.016    | 0.015    | 0.015    |          |          |          |          |          |          |
| E.1   | BS3        |       | Trunk        | E         | 15          | 0.021    | 0.021    | 0.026    |          |          |          |          |          |          |
| E.1   | BS4        |       | Trunk        | E         | 15          | 0.041    | 0.039    | 0.035    |          |          |          |          |          |          |
| E.1   | BS5        |       | Trunk        | E         | 15          | 0.036    | 0.026    | 0.023    |          |          |          |          |          |          |
|       |            |       |              |           |             |          |          |          |          |          |          |          |          |          |
| E.1   | BS1        |       | Trunk        | E         | 16          |          |          |          | 0.005    | 0.004    | 0.003    |          |          |          |
| E.1   | BS2        |       | Trunk        | E         | 16          |          |          |          | 0.006    | 0.007    | 0.006    |          |          |          |
| E.1   | BS3        |       | Trunk        | E         | 16          |          |          |          | 0.014    | 0.013    | 0.014    |          |          |          |
| E.1   | BS4        |       | Trunk        | E         | 16          |          |          |          | 0.022    | 0.018    | 0.019    |          |          |          |
| E.1   | BS5        |       | Trunk        | E         | 16          |          |          |          | 0.014    | 0.013    | 0.014    |          |          |          |
|       |            |       |              |           |             |          |          |          |          |          |          |          |          |          |
| E.1   | BS1        |       | Trunk        | E         | 17          |          |          |          |          |          | 0.003    | 0.003    | 0.003    | 0.004    |
| E.1   | BS2        |       | Trunk        | E         | 17          |          |          |          |          |          | 0.005    | 0.007    | 0.009    | 0.012    |
| E.1   | BS3        |       | Trunk        | E         | 17          |          |          |          |          |          | 0.013    | 0.014    | 0.012    | 0.012    |
| E.1   | BS4        |       | Trunk        | E         | 17          |          |          |          |          |          | 0.017    | 0.019    | 0.018    | 0.018    |
| E.1   | BS5        |       | Trunk        | E         | 17          |          |          |          |          |          | 0.016    | 0.018    | 0.016    | 0.015    |
|       |            |       |              |           |             |          |          |          |          |          |          |          |          |          |
| E.2   | PB         |       | Trunk        | E         | 15          | 0.104    | 0.092    | 0.065    |          |          |          |          |          |          |
| E.2   | PF         |       | Trunk        | E         | 15          | 0.044    | 0.055    | 0.035    |          |          |          |          |          |          |
|       |            |       |              |           |             |          |          |          |          |          |          |          |          |          |
| E.2   | PB         |       | Trunk        | E         | 16          |          |          |          | 0.153    | 0.163    | 0.121    |          |          |          |
| E.2   | PF         |       | Trunk        | E         | 16          |          |          |          | 0.038    | 0.043    | 0.039    |          |          |          |
|       |            |       |              |           |             |          |          |          |          |          |          |          |          |          |
| E.2   | PB         |       | Trunk        | E         | 17          |          |          |          |          |          | 0.136    | 0.158    | 0.095    | 0.144    |
| E.2   | PF         |       | Trunk        | E         | 17          |          |          |          |          |          | 0.031    | 0.028    | 0.033    | 0.037    |

## **Appendix F – MPE Test Results Summary for APX6500 UHF R1**



Table F.1

## APX6500 UHF R1 - MPE measurement data for Bystander

| Ant Loc. | Ant. Model/ Desc.    | Ant. Gain (dBi) | Tx Freq (MHz) | Max Pwr (W) | Initial Pwr (W) | Test Mode | E/H Field | Probe Cal. Factor | Test Pos. | Bystander (BS) Positions |       |       |       |        |        |        |        |        |        | DUT Max. TX Factor | Avg. over Body (mW/cm2) | Calc. P.D. (mW/cm2) | Max Calc. P.D. (mW/cm2) |
|----------|----------------------|-----------------|---------------|-------------|-----------------|-----------|-----------|-------------------|-----------|--------------------------|-------|-------|-------|--------|--------|--------|--------|--------|--------|--------------------|-------------------------|---------------------|-------------------------|
|          |                      |                 |               |             |                 |           |           |                   |           | 20 cm                    | 40 cm | 60 cm | 80 cm | 100 cm | 120 cm | 140 cm | 160 cm | 180 cm | 200 cm |                    |                         |                     |                         |
| Roof     | HAE4003A, 450-470MHz | 2.15            | 450.0125      | 48.0        | 46.8            | CW        | E         | 1.00              | BS1       | 0.007                    | 0.005 | 0.013 | 0.014 | 0.032  | 0.054  | 0.094  | 0.115  | 0.138  | 0.164  | 0.5                | 0.064                   | 0.032               | 0.03                    |
| Roof     | HAE4003A, 450-470MHz | 2.15            | 460.0000      | 48.0        | 47.0            | CW        | E         | 0.98              | BS1       | 0.006                    | 0.005 | 0.018 | 0.022 | 0.035  | 0.057  | 0.07   | 0.093  | 0.108  | 0.164  | 0.5                | 0.057                   | 0.028               | 0.03                    |
| Roof     | HAE4003A, 450-470MHz | 2.15            | 469.9875      | 48.0        | 47.4            | CW        | E         | 0.95              | BS1       | 0.01                     | 0.014 | 0.016 | 0.019 | 0.028  | 0.055  | 0.078  | 0.115  | 0.136  | 0.138  | 0.5                | 0.058                   | 0.029               | 0.03                    |
| Roof     | HAE4003A, 450-470MHz | 2.15            | 450.0125      | 48.0        | 46.8            | CW        | E         | 1.00              | BS2       | 0.012                    | 0.014 | 0.015 | 0.016 | 0.023  | 0.038  | 0.05   | 0.074  | 0.106  | 0.105  | 0.5                | 0.045                   | 0.023               | 0.02                    |
| Roof     | HAE4003A, 450-470MHz | 2.15            | 460.0000      | 48.0        | 47.0            | CW        | E         | 0.98              | BS2       | 0.011                    | 0.014 | 0.015 | 0.016 | 0.022  | 0.033  | 0.061  | 0.086  | 0.118  | 0.11   | 0.5                | 0.048                   | 0.024               | 0.02                    |
| Roof     | HAE4003A, 450-470MHz | 2.15            | 469.9875      | 48.0        | 47.4            | CW        | E         | 0.95              | BS2       | 0.007                    | 0.007 | 0.008 | 0.011 | 0.018  | 0.04   | 0.053  | 0.08   | 0.1    | 0.101  | 0.5                | 0.040                   | 0.020               | 0.02                    |
| Roof     | HAE4003A, 450-470MHz | 2.15            | 450.0125      | 48.0        | 46.8            | CW        | E         | 1.00              | BS3       | 0.008                    | 0.013 | 0.018 | 0.022 | 0.024  | 0.03   | 0.045  | 0.06   | 0.063  | 0.068  | 0.5                | 0.035                   | 0.018               | 0.02                    |
| Roof     | HAE4003A, 450-470MHz | 2.15            | 460.0000      | 48.0        | 47.0            | CW        | E         | 0.98              | BS3       | 0.007                    | 0.017 | 0.018 | 0.024 | 0.028  | 0.038  | 0.04   | 0.047  | 0.056  | 0.073  | 0.5                | 0.034                   | 0.017               | 0.02                    |
| Roof     | HAE4003A, 450-470MHz | 2.15            | 469.9875      | 48.0        | 47.4            | CW        | E         | 0.95              | BS3       | 0.008                    | 0.013 | 0.016 | 0.018 | 0.028  | 0.034  | 0.038  | 0.042  | 0.044  | 0.068  | 0.5                | 0.029                   | 0.015               | 0.01                    |
| Roof     | HAE4003A, 450-470MHz | 2.15            | 450.0125      | 48.0        | 46.8            | CW        | E         | 1.00              | BS4       | 0.011                    | 0.013 | 0.01  | 0.02  | 0.024  | 0.03   | 0.031  | 0.032  | 0.035  | 0.04   | 0.5                | 0.025                   | 0.012               | 0.01                    |
| Roof     | HAE4003A, 450-470MHz | 2.15            | 460.0000      | 48.0        | 47.0            | CW        | E         | 0.98              | BS4       | 0.004                    | 0.008 | 0.01  | 0.011 | 0.013  | 0.02   | 0.024  | 0.026  | 0.028  | 0.03   | 0.5                | 0.017                   | 0.009               | 0.01                    |
| Roof     | HAE4003A, 450-470MHz | 2.15            | 469.9875      | 48.0        | 47.4            | CW        | E         | 0.95              | BS4       | 0.006                    | 0.011 | 0.015 | 0.017 | 0.028  | 0.032  | 0.036  | 0.035  | 0.033  | 0.043  | 0.5                | 0.024                   | 0.012               | 0.01                    |
| Roof     | HAE4003A, 450-470MHz | 2.15            | 450.0125      | 48.0        | 46.8            | CW        | E         | 1.00              | BS5       | 0.001                    | 0.001 | 0.001 | 0.005 | 0.006  | 0.008  | 0.021  | 0.022  | 0.024  | 0.025  | 0.5                | 0.011                   | 0.006               | 0.01                    |
| Roof     | HAE4003A, 450-470MHz | 2.15            | 460.0000      | 48.0        | 47.0            | CW        | E         | 0.98              | BS5       | 0.001                    | 0.002 | 0.003 | 0.005 | 0.006  | 0.016  | 0.024  | 0.023  | 0.02   | 0.024  | 0.5                | 0.012                   | 0.006               | 0.01                    |
| Roof     | HAE4003A, 450-470MHz | 2.15            | 469.9875      | 48.0        | 47.4            | CW        | E         | 0.95              | BS5       | 0.001                    | 0.001 | 0.002 | 0.005 | 0.006  | 0.007  | 0.02   | 0.022  | 0.03   | 0.027  | 0.5                | 0.011                   | 0.006               | 0.01                    |

Notes:

MPE calculations are defined in section 15.0

**Table F.1 (Continued)**  
**APX6500 UHF R1- MPE measurement data for Bystander**

| D.U.T. Info. |                      |                 |               |             |                 |           | Probe Info. |                   |     | MPE Measurements |                          |       |       |       |        |        |        |        | DUT Max. TX Factor | Avg. over Body (mW/cm2) | Calc. P.D. (mW/cm2) | Max Calc. P.D. (mW/cm2) |        |
|--------------|----------------------|-----------------|---------------|-------------|-----------------|-----------|-------------|-------------------|-----|------------------|--------------------------|-------|-------|-------|--------|--------|--------|--------|--------------------|-------------------------|---------------------|-------------------------|--------|
| Ant Loc.     | Ant. Model/ Desc.    | Ant. Gain (dBi) | Tx Freq (MHz) | Max Pwr (W) | Initial Pwr (W) | Test Mode | E/H Field   | Probe Cal. Factor |     | Test Pos.        | Bystander (BS) Positions |       |       |       |        |        |        |        |                    |                         |                     |                         |        |
|              |                      |                 |               |             |                 |           |             |                   |     |                  | 20 cm                    | 40 cm | 60 cm | 80 cm | 100 cm | 120 cm | 140 cm | 160 cm |                    |                         |                     |                         | 180 cm |
| Roof         | HAE4011A, 450-470MHz | 5.65            | 450.0125      | 48.0        | 46.8            | CW        | E           | 1.00              | BS1 | 0.00             | 0.00                     | 0.00  | 0.00  | 0.02  | 0.04   | 0.062  | 0.096  | 0.11   | 0.104              | 0.5                     | 0.043               | 0.022                   | 0.02   |
| Roof         | HAE4011A, 450-470MHz | 5.65            | 460.0000      | 48.0        | 47.0            | CW        | E           | 0.98              | BS1 | 0.00             | 0.00                     | 0.00  | 0.01  | 0.018 | 0.035  | 0.064  | 0.106  | 0.126  | 0.128              | 0.5                     | 0.048               | 0.024                   | 0.02   |
| Roof         | HAE4011A, 450-470MHz | 5.65            | 469.9875      | 48.0        | 47.4            | CW        | E           | 0.95              | BS1 | 0.00             | 0.00                     | 0.00  | 0.003 | 0.004 | 0.016  | 0.043  | 0.077  | 0.109  | 0.115              | 0.5                     | 0.035               | 0.018                   | 0.02   |
| Roof         | HAE4011A, 450-470MHz | 5.65            | 450.0125      | 48.0        | 46.8            | CW        | E           | 1.00              | BS2 | 0.00             | 0.00                     | 0.01  | 0.01  | 0.02  | 0.022  | 0.046  | 0.07   | 0.08   | 0.09               | 0.5                     | 0.035               | 0.018                   | 0.02   |
| Roof         | HAE4011A, 450-470MHz | 5.65            | 460.0000      | 48.0        | 47.0            | CW        | E           | 0.98              | BS2 | 0.00             | 0.00                     | 0.01  | 0.01  | 0.01  | 0.032  | 0.068  | 0.1    | 0.117  | 0.118              | 0.5                     | 0.045               | 0.023                   | 0.02   |
| Roof         | HAE4011A, 450-470MHz | 5.65            | 469.9875      | 48.0        | 47.4            | CW        | E           | 0.95              | BS2 | 0.00             | 0.00                     | 0.00  | 0.004 | 0.008 | 0.02   | 0.04   | 0.064  | 0.087  | 0.09               | 0.5                     | 0.030               | 0.015                   | 0.02   |
| Roof         | HAE4011A, 450-470MHz | 5.65            | 450.0125      | 48.0        | 46.8            | CW        | E           | 1.00              | BS3 | 0.00             | 0.00                     | 0.00  | 0.01  | 0.02  | 0.027  | 0.05   | 0.053  | 0.05   | 0.048              | 0.5                     | 0.027               | 0.014                   | 0.01   |
| Roof         | HAE4011A, 450-470MHz | 5.65            | 460.0000      | 48.0        | 47.0            | CW        | E           | 0.98              | BS3 | 0.00             | 0.00                     | 0.01  | 0.01  | 0.017 | 0.028  | 0.043  | 0.05   | 0.055  | 0.057              | 0.5                     | 0.027               | 0.013                   | 0.01   |
| Roof         | HAE4011A, 450-470MHz | 5.65            | 469.9875      | 48.0        | 47.4            | CW        | E           | 0.95              | BS3 | 0.00             | 0.00                     | 0.00  | 0.008 | 0.016 | 0.027  | 0.028  | 0.037  | 0.046  | 0.052              | 0.5                     | 0.021               | 0.011                   | 0.01   |
| Roof         | HAE4011A, 450-470MHz | 5.65            | 450.0125      | 48.0        | 46.8            | CW        | E           | 1.00              | BS4 | 0.00             | 0.01                     | 0.01  | 0.01  | 0.02  | 0.02   | 0.023  | 0.032  | 0.04   | 0.04               | 0.5                     | 0.019               | 0.009                   | 0.01   |
| Roof         | HAE4011A, 450-470MHz | 5.65            | 460.0000      | 48.0        | 47.0            | CW        | E           | 0.98              | BS4 | 0.01             | 0.01                     | 0.01  | 0.01  | 0.01  | 0.02   | 0.024  | 0.03   | 0.041  | 0.045              | 0.5                     | 0.019               | 0.010                   | 0.01   |
| Roof         | HAE4011A, 450-470MHz | 5.65            | 469.9875      | 48.0        | 47.4            | CW        | E           | 0.95              | BS4 | 0.00             | 0.00                     | 0.01  | 0.01  | 0.023 | 0.038  | 0.04   | 0.042  | 0.045  | 0.056              | 0.5                     | 0.025               | 0.013                   | 0.01   |
| Roof         | HAE4011A, 450-470MHz | 5.65            | 450.0125      | 48.0        | 46.8            | CW        | E           | 1.00              | BS5 | 0.00             | 0.00                     | 0.01  | 0.01  | 0.02  | 0.033  | 0.03   | 0.032  | 0.04   | 0.056              | 0.5                     | 0.024               | 0.012                   | 0.01   |
| Roof         | HAE4011A, 450-470MHz | 5.65            | 460.0000      | 48.0        | 47.0            | CW        | E           | 0.98              | BS5 | 0.00             | 0.00                     | 0.00  | 0.01  | 0.01  | 0.021  | 0.026  | 0.028  | 0.035  | 0.043              | 0.5                     | 0.017               | 0.009                   | 0.01   |
| Roof         | HAE4011A, 450-470MHz | 5.65            | 469.9875      | 48.0        | 47.4            | CW        | E           | 0.95              | BS5 | 0.00             | 0.00                     | 0.00  | 0.002 | 0.003 | 0.01   | 0.025  | 0.03   | 0.035  | 0.043              | 0.5                     | 0.014               | 0.007                   | 0.01   |

Notes:

MPE calculations are defined in section 15.0

**Table F.1 (Continued)**  
**APX6500 UHF R1 - MPE measurement data for Bystander**

| D.U.T. Info. |                     |                 |               |             |                 |           | Probe Info. |                   | Test Pos. | MPE Measurements         |        |        |        |        |        |        |        |        | DUT Max. TX Factor | Avg. over Body (mW/cm2) | Calc. P.D. (mW/cm2) | Max Calc. P.D. (mW/cm2) |        |
|--------------|---------------------|-----------------|---------------|-------------|-----------------|-----------|-------------|-------------------|-----------|--------------------------|--------|--------|--------|--------|--------|--------|--------|--------|--------------------|-------------------------|---------------------|-------------------------|--------|
| Ant Loc.     | Ant. Model/ Desc.   | Ant. Gain (dBi) | Tx Freq (MHz) | Max Pwr (W) | Initial Pwr (W) | Test Mode | E/H Field   | Probe Cal. Factor |           | Bystander (BS) Positions |        |        |        |        |        |        |        |        |                    |                         |                     |                         |        |
|              |                     |                 |               |             |                 |           |             |                   |           | 20 cm                    | 40 cm  | 60 cm  | 80 cm  | 100 cm | 120 cm | 140 cm | 160 cm | 180 cm |                    |                         |                     |                         | 200 cm |
| Roof         | HAE6010A,380-433MHz | 5.65            | 380.0125      | 48.0        | 47.6            | CW        | E           | 1.09              | BS1       | 0.0210                   | 0.0230 | 0.0220 | 0.0240 | 0.0250 | 0.0270 | 0.0280 | 0.0250 | 0.0200 | 0.0210             | 0.5                     | 0.026               | 0.01                    | 0.01   |
| Roof         | HAE6010A,380-433MHz | 5.65            | 393.0125      | 48.0        | 47.6            | CW        | E           | 1.11              | BS1       | 0.0180                   | 0.0170 | 0.0210 | 0.0270 | 0.0300 | 0.0350 | 0.0310 | 0.0350 | 0.0210 | 0.0180             | 0.5                     | 0.028               | 0.01                    | 0.01   |
| Roof         | HAE6010A,380-433MHz | 5.65            | 406.5000      | 48.0        | 47.1            | CW        | E           | 1.11              | BS1       | 0.0190                   | 0.0130 | 0.0160 | 0.0210 | 0.0250 | 0.0300 | 0.0330 | 0.0380 | 0.0240 | 0.0150             | 0.5                     | 0.026               | 0.01                    | 0.01   |
| Roof         | HAE6010A,380-433MHz | 5.65            | 419.5000      | 48.0        | 47.4            | CW        | E           | 1.07              | BS1       | 0.0170                   | 0.0140 | 0.0260 | 0.0280 | 0.0340 | 0.0380 | 0.0420 | 0.0340 | 0.0220 | 0.0100             | 0.5                     | 0.028               | 0.01                    | 0.01   |
| Roof         | HAE6010A,380-433MHz | 5.65            | 432.9875      | 48.0        | 46.6            | CW        | E           | 1.04              | BS1       | 0.0200                   | 0.0260 | 0.0310 | 0.0300 | 0.0320 | 0.0380 | 0.0430 | 0.0350 | 0.0210 | 0.0130             | 0.5                     | 0.030               | 0.02                    | 0.02   |
| Roof         | HAE6010A,380-433MHz | 5.65            | 380.0125      | 48.0        | 47.6            | CW        | E           | 1.09              | BS2       | 0.0130                   | 0.0180 | 0.0180 | 0.0170 | 0.0180 | 0.0230 | 0.0200 | 0.0150 | 0.0160 | 0.0200             | 0.5                     | 0.019               | 0.01                    | 0.01   |
| Roof         | HAE6010A,380-433MHz | 5.65            | 393.0125      | 48.0        | 47.6            | CW        | E           | 1.11              | BS2       | 0.0200                   | 0.0280 | 0.0270 | 0.0260 | 0.0250 | 0.0250 | 0.0210 | 0.0160 | 0.0140 | 0.0120             | 0.5                     | 0.024               | 0.01                    | 0.01   |
| Roof         | HAE6010A,380-433MHz | 5.65            | 406.5000      | 48.0        | 47.1            | CW        | E           | 1.11              | BS2       | 0.0220                   | 0.0240 | 0.0250 | 0.0250 | 0.0270 | 0.0300 | 0.0250 | 0.0240 | 0.0150 | 0.0100             | 0.5                     | 0.025               | 0.01                    | 0.01   |
| Roof         | HAE6010A,380-433MHz | 5.65            | 419.5000      | 48.0        | 47.4            | CW        | E           | 1.07              | BS2       | 0.0160                   | 0.0170 | 0.0170 | 0.0180 | 0.0220 | 0.0310 | 0.0400 | 0.0420 | 0.0210 | 0.0130             | 0.5                     | 0.025               | 0.01                    | 0.01   |
| Roof         | HAE6010A,380-433MHz | 5.65            | 432.9875      | 48.0        | 46.6            | CW        | E           | 1.04              | BS2       | 0.0160                   | 0.0170 | 0.0210 | 0.0180 | 0.0200 | 0.0240 | 0.0370 | 0.0420 | 0.0230 | 0.0160             | 0.5                     | 0.024               | 0.01                    | 0.01   |
| Roof         | HAE6010A,380-433MHz | 5.65            | 380.0125      | 48.0        | 47.6            | CW        | E           | 1.09              | BS3       | 0.0170                   | 0.0180 | 0.0150 | 0.0200 | 0.0160 | 0.0060 | 0.0050 | 0.0040 | 0.0030 | 0.0050             | 0.5                     | 0.012               | 0.01                    | 0.01   |
| Roof         | HAE6010A,380-433MHz | 5.65            | 393.0125      | 48.0        | 47.6            | CW        | E           | 1.11              | BS3       | 0.0150                   | 0.0160 | 0.0200 | 0.0280 | 0.0230 | 0.0220 | 0.0100 | 0.0060 | 0.0040 | 0.0030             | 0.5                     | 0.016               | 0.01                    | 0.01   |
| Roof         | HAE6010A,380-433MHz | 5.65            | 406.5000      | 48.0        | 47.1            | CW        | E           | 1.11              | BS3       | 0.0160                   | 0.0200 | 0.0200 | 0.0220 | 0.0160 | 0.0180 | 0.0140 | 0.0080 | 0.0070 | 0.0060             | 0.5                     | 0.016               | 0.01                    | 0.01   |
| Roof         | HAE6010A,380-433MHz | 5.65            | 419.5000      | 48.0        | 47.4            | CW        | E           | 1.07              | BS3       | 0.0200                   | 0.0220 | 0.0230 | 0.0260 | 0.0170 | 0.0130 | 0.0150 | 0.0170 | 0.0180 | 0.0110             | 0.5                     | 0.019               | 0.01                    | 0.01   |
| Roof         | HAE6010A,380-433MHz | 5.65            | 432.9875      | 48.0        | 46.6            | CW        | E           | 1.04              | BS3       | 0.0220                   | 0.0260 | 0.0280 | 0.0300 | 0.0220 | 0.0200 | 0.0200 | 0.0180 | 0.0140 | 0.0070             | 0.5                     | 0.022               | 0.01                    | 0.01   |

Notes:

MPE calculations are defined in section 15.0  
Blue fonts: Frequencies not regulated by FCC.

**Table F.1 (Continued)**  
**APX6500 UHF R1 - MPE measurement data for Bystander**

| D.U.T. Info. |                     |                 |               |             |                 |           | Probe Info. |                   | Test Pos. | MPE Measurements         |       |       |       |        |        |        |        |        | DUT Max. TX Factor | Avg. over Body (mW/cm2) | Calc. P.D. (mW/cm2) | Max Calc. P.D. (mW/cm2) |        |
|--------------|---------------------|-----------------|---------------|-------------|-----------------|-----------|-------------|-------------------|-----------|--------------------------|-------|-------|-------|--------|--------|--------|--------|--------|--------------------|-------------------------|---------------------|-------------------------|--------|
| Ant Loc.     | Ant. Model/ Desc.   | Ant. Gain (dBi) | Tx Freq (MHz) | Max Pwr (W) | Initial Pwr (W) | Test Mode | E/H Field   | Probe Cal. Factor |           | Bystander (BS) Positions |       |       |       |        |        |        |        |        |                    |                         |                     |                         |        |
|              |                     |                 |               |             |                 |           |             |                   |           | 20 cm                    | 40 cm | 60 cm | 80 cm | 100 cm | 120 cm | 140 cm | 160 cm | 180 cm |                    |                         |                     |                         | 200 cm |
| Roof         | HAE6010A,380-433MHz | 5.65            | 380.0125      | 48.0        | 47.6            | CW        | E           | 1.09              | BS4       | 0.003                    | 0.004 | 0.003 | 0.003 | 0.008  | 0.012  | 0.008  | 0.011  | 0.004  | 0.002              | 0.5                     | 0.006               | 0.003                   | 0.00   |
| Roof         | HAE6010A,380-433MHz | 5.65            | 393.0125      | 48.0        | 47.6            | CW        | E           | 1.11              | BS4       | 0.005                    | 0.006 | 0.004 | 0.01  | 0.01   | 0.016  | 0.016  | 0.013  | 0.007  | 0.004              | 0.5                     | 0.010               | 0.005                   | 0.01   |
| Roof         | HAE6010A,380-433MHz | 5.65            | 406.5000      | 48.0        | 47.1            | CW        | E           | 1.11              | BS4       | 0.018                    | 0.02  | 0.016 | 0.022 | 0.025  | 0.022  | 0.011  | 0.006  | 0.005  | 0.004              | 0.5                     | 0.017               | 0.008                   | 0.01   |
| Roof         | HAE6010A,380-433MHz | 5.65            | 419.5000      | 48.0        | 47.4            | CW        | E           | 1.07              | BS4       | 0.015                    | 0.018 | 0.016 | 0.02  | 0.024  | 0.026  | 0.01   | 0.003  | 0.003  | 0.00               | 0.5                     | 0.015               | 0.007                   | 0.01   |
| Roof         | HAE6010A,380-433MHz | 5.65            | 432.9875      | 48.0        | 46.6            | CW        | E           | 1.04              | BS4       | 0.01                     | 0.008 | 0.007 | 0.015 | 0.023  | 0.022  | 0.01   | 0.004  | 0.004  | 0.00               | 0.5                     | 0.011               | 0.005                   | 0.01   |
| Roof         | HAE6010A,380-433MHz | 5.65            | 380.0125      | 48.0        | 47.6            | CW        | E           | 1.09              | BS5       | 0.001                    | 0.001 | 0.001 | 0.001 | 0.001  | 0.002  | 0.002  | 0.001  | 0.001  | 0.001              | 0.5                     | 0.001               | 0.001                   | 0.00   |
| Roof         | HAE6010A,380-433MHz | 5.65            | 393.0125      | 48.0        | 47.6            | CW        | E           | 1.11              | BS5       | 0.001                    | 0.001 | 0.001 | 0.002 | 0.003  | 0.005  | 0.002  | 0.002  | 0.002  | 0.003              | 0.5                     | 0.002               | 0.001                   | 0.00   |
| Roof         | HAE6010A,380-433MHz | 5.65            | 406.5000      | 48.0        | 47.1            | CW        | E           | 1.11              | BS5       | 0.001                    | 0.001 | 0.003 | 0.004 | 0.005  | 0.008  | 0.005  | 0.003  | 0.002  | 0.002              | 0.5                     | 0.004               | 0.002                   | 0.00   |
| Roof         | HAE6010A,380-433MHz | 5.65            | 419.5000      | 48.0        | 47.4            | CW        | E           | 1.07              | BS5       | 0.001                    | 0.002 | 0.003 | 0.005 | 0.013  | 0.017  | 0.02   | 0.015  | 0.005  | 0.00               | 0.5                     | 0.009               | 0.004                   | 0.00   |
| Roof         | HAE6010A,380-433MHz | 5.65            | 432.9875      | 48.0        | 46.6            | CW        | E           | 1.04              | BS5       | 0.001                    | 0.002 | 0.004 | 0.008 | 0.012  | 0.014  | 0.01   | 0.005  | 0.004  | 0.00               | 0.5                     | 0.007               | 0.003                   | 0.00   |
| Roof         | HAE6011A,380-433MHz | 7.15            | 380.0125      | 48.0        | 47.6            | CW        | E           | 1.09              | BS1       | 0.001                    | 0.001 | 0.001 | 0.002 | 0.006  | 0.03   | 0.067  | 0.113  | 0.15   | 0.154              | 0.5                     | 0.057               | 0.029                   | 0.03   |
| Roof         | HAE6011A,380-433MHz | 7.15            | 393.0125      | 48.0        | 47.6            | CW        | E           | 1.11              | BS1       | 0.001                    | 0.001 | 0.001 | 0.001 | 0.005  | 0.018  | 0.057  | 0.105  | 0.147  | 0.167              | 0.5                     | 0.056               | 0.028                   | 0.03   |
| Roof         | HAE6011A,380-433MHz | 7.15            | 406.5000      | 48.0        | 47.1            | CW        | E           | 1.11              | BS1       | 0.001                    | 0.001 | 0.001 | 0.003 | 0.005  | 0.019  | 0.045  | 0.076  | 0.141  | 0.16               | 0.5                     | 0.050               | 0.025                   | 0.03   |
| Roof         | HAE6011A,380-433MHz | 7.15            | 419.5000      | 48.0        | 47.4            | CW        | E           | 1.07              | BS1       | 0.001                    | 0.001 | 0.002 | 0.003 | 0.004  | 0.005  | 0.03   | 0.063  | 0.094  | 0.104              | 0.5                     | 0.033               | 0.016                   | 0.02   |
| Roof         | HAE6011A,380-433MHz | 7.15            | 432.9875      | 48.0        | 46.6            | CW        | E           | 1.04              | BS1       | 0.001                    | 0.001 | 0.001 | 0.001 | 0.002  | 0.005  | 0.02   | 0.046  | 0.086  | 0.10               | 0.5                     | 0.027               | 0.014                   | 0.01   |

Notes:

MPE calculations are defined in section 15.0  
 Blue fonts: Frequencies not regulated by FCC.

**Table F.1 (Continued)**  
**APX6500 UHF R1 - MPE measurement data for Bystander**

| D.U.T. Info. |                     |                 |               |             |                 |           | Probe Info. |                   | Test Pos. | MPE Measurements         |       |       |       |        |        |        |        |        |        | DUT Max. TX Factor | Avg. over Body (mW/cm2) | Calc. P.D. (mW/cm2) | Max Calc. P.D. (mW/cm2) |
|--------------|---------------------|-----------------|---------------|-------------|-----------------|-----------|-------------|-------------------|-----------|--------------------------|-------|-------|-------|--------|--------|--------|--------|--------|--------|--------------------|-------------------------|---------------------|-------------------------|
| Ant Loc.     | Ant. Model/ Desc.   | Ant. Gain (dBi) | Tx Freq (MHz) | Max Pwr (W) | Initial Pwr (W) | Test Mode | E/H Field   | Probe Cal. Factor |           | Bystander (BS) Positions |       |       |       |        |        |        |        |        |        |                    |                         |                     |                         |
|              |                     |                 |               |             |                 |           |             |                   |           | 20 cm                    | 40 cm | 60 cm | 80 cm | 100 cm | 120 cm | 140 cm | 160 cm | 180 cm | 200 cm |                    |                         |                     |                         |
| Roof         | HAE6011A,380-433MHz | 7.15            | 380.0125      | 48.0        | 47.6            | CW        | E           | 1.09              | BS2       | 0.001                    | 0.002 | 0.003 | 0.005 | 0.008  | 0.024  | 0.046  | 0.082  | 0.103  | 0.113  | 0.5                | 0.042                   | 0.021               | 0.02                    |
| Roof         | HAE6011A,380-433MHz | 7.15            | 393.0125      | 48.0        | 47.6            | CW        | E           | 1.11              | BS2       | 0.001                    | 0.003 | 0.004 | 0.006 | 0.008  | 0.018  | 0.042  | 0.07   | 0.106  | 0.121  | 0.5                | 0.042                   | 0.021               | 0.02                    |
| Roof         | HAE6011A,380-433MHz | 7.15            | 406.5000      | 48.0        | 47.1            | CW        | E           | 1.11              | BS2       | 0.002                    | 0.005 | 0.004 | 0.003 | 0.004  | 0.015  | 0.026  | 0.05   | 0.082  | 0.101  | 0.5                | 0.032                   | 0.016               | 0.02                    |
| Roof         | HAE6011A,380-433MHz | 7.15            | 419.5000      | 48.0        | 47.4            | CW        | E           | 1.07              | BS2       | 0.001                    | 0.001 | 0.001 | 0.002 | 0.003  | 0.018  | 0.04   | 0.067  | 0.09   | 0.105  | 0.5                | 0.035                   | 0.018               | 0.02                    |
| Roof         | HAE6011A,380-433MHz | 7.15            | 432.9875      | 48.0        | 46.6            | CW        | E           | 1.04              | BS2       | 0.001                    | 0.001 | 0.002 | 0.001 | 0.002  | 0.008  | 0.02   | 0.038  | 0.065  | 0.08   | 0.5                | 0.023                   | 0.012               | 0.01                    |
| Roof         | HAE6011A,380-433MHz | 7.15            | 380.0125      | 48.0        | 47.6            | CW        | E           | 1.09              | BS3       | 0.002                    | 0.003 | 0.008 | 0.015 | 0.026  | 0.03   | 0.038  | 0.048  | 0.05   | 0.053  | 0.5                | 0.030                   | 0.015               | 0.02                    |
| Roof         | HAE6011A,380-433MHz | 7.15            | 393.0125      | 48.0        | 47.6            | CW        | E           | 1.11              | BS3       | 0.002                    | 0.003 | 0.006 | 0.01  | 0.02   | 0.032  | 0.042  | 0.057  | 0.08   | 0.09   | 0.5                | 0.038                   | 0.019               | 0.02                    |
| Roof         | HAE6011A,380-433MHz | 7.15            | 406.5000      | 48.0        | 47.1            | CW        | E           | 1.11              | BS3       | 0.001                    | 0.002 | 0.003 | 0.004 | 0.023  | 0.045  | 0.06   | 0.092  | 0.107  | 0.112  | 0.5                | 0.050                   | 0.025               | 0.03                    |
| Roof         | HAE6011A,380-433MHz | 7.15            | 419.5000      | 48.0        | 47.4            | CW        | E           | 1.07              | BS3       | 0.001                    | 0.002 | 0.003 | 0.005 | 0.007  | 0.021  | 0.027  | 0.05   | 0.061  | 0.068  | 0.5                | 0.026                   | 0.013               | 0.01                    |
| Roof         | HAE6011A,380-433MHz | 7.15            | 432.9875      | 48.0        | 46.6            | CW        | E           | 1.04              | BS3       | 0.001                    | 0.001 | 0.001 | 0.002 | 0.003  | 0.006  | 0.02   | 0.034  | 0.047  | 0.05   | 0.5                | 0.017                   | 0.009               | 0.01                    |
| Roof         | HAE6011A,380-433MHz | 7.15            | 380.0125      | 48.0        | 47.6            | CW        | E           | 1.09              | BS4       | 0.002                    | 0.003 | 0.005 | 0.006 | 0.01   | 0.022  | 0.024  | 0.03   | 0.04   | 0.054  | 0.5                | 0.021                   | 0.011               | 0.01                    |
| Roof         | HAE6011A,380-433MHz | 7.15            | 393.0125      | 48.0        | 47.6            | CW        | E           | 1.11              | BS4       | 0.003                    | 0.004 | 0.004 | 0.008 | 0.023  | 0.032  | 0.043  | 0.048  | 0.06   | 0.072  | 0.5                | 0.033                   | 0.016               | 0.02                    |
| Roof         | HAE6011A,380-433MHz | 7.15            | 406.5000      | 48.0        | 47.1            | CW        | E           | 1.11              | BS4       | 0.003                    | 0.004 | 0.004 | 0.005 | 0.006  | 0.008  | 0.02   | 0.027  | 0.042  | 0.053  | 0.5                | 0.019                   | 0.010               | 0.01                    |
| Roof         | HAE6011A,380-433MHz | 7.15            | 419.5000      | 48.0        | 47.4            | CW        | E           | 1.07              | BS4       | 0.002                    | 0.003 | 0.003 | 0.005 | 0.011  | 0.018  | 0.022  | 0.026  | 0.033  | 0.04   | 0.5                | 0.017                   | 0.009               | 0.01                    |
| Roof         | HAE6011A,380-433MHz | 7.15            | 432.9875      | 48.0        | 46.6            | CW        | E           | 1.04              | BS4       | 0.002                    | 0.002 | 0.003 | 0.005 | 0.007  | 0.01   | 0.01   | 0.014  | 0.023  | 0.03   | 0.5                | 0.011                   | 0.005               | 0.01                    |
| Roof         | HAE6011A,380-433MHz | 7.15            | 380.0125      | 48.0        | 47.6            | CW        | E           | 1.09              | BS5       | 0.002                    | 0.002 | 0.002 | 0.008 | 0.015  | 0.02   | 0.025  | 0.03   | 0.041  | 0.054  | 0.5                | 0.022                   | 0.011               | 0.01                    |
| Roof         | HAE6011A,380-433MHz | 7.15            | 393.0125      | 48.0        | 47.6            | CW        | E           | 1.11              | BS5       | 0.002                    | 0.003 | 0.004 | 0.005 | 0.006  | 0.007  | 0.02   | 0.03   | 0.051  | 0.061  | 0.5                | 0.021                   | 0.010               | 0.01                    |
| Roof         | HAE6011A,380-433MHz | 7.15            | 406.5000      | 48.0        | 47.1            | CW        | E           | 1.11              | BS5       | 0.001                    | 0.001 | 0.002 | 0.002 | 0.007  | 0.018  | 0.03   | 0.036  | 0.045  | 0.058  | 0.5                | 0.022                   | 0.011               | 0.01                    |
| Roof         | HAE6011A,380-433MHz | 7.15            | 419.5000      | 48.0        | 47.4            | CW        | E           | 1.07              | BS5       | 0.001                    | 0.001 | 0.002 | 0.006 | 0.011  | 0.02   | 0.023  | 0.031  | 0.041  | 0.052  | 0.5                | 0.020                   | 0.010               | 0.01                    |
| Roof         | HAE6011A,380-433MHz | 7.15            | 432.9875      | 48.0        | 46.6            | CW        | E           | 1.04              | BS5       | 0.001                    | 0.001 | 0.001 | 0.004 | 0.006  | 0.01   | 0.02   | 0.018  | 0.022  | 0.03   | 0.5                | 0.011                   | 0.006               | 0.01                    |

Notes:

MPE calculations are defined in section 15.0  
 Blue fonts: Frequencies not regulated by FCC.

**Table F.1 (Continued)**  
**APX6500 UHF R1 - MPE measurement data for Bystander**

| D.U.T. Info. |                      |                 |               |             |                 |           | Probe Info. |                   |     | MPE Measurements |                          |       |       |       |        |        |        |        | DUT Max. TX Factor | Avg. over Body (mW/cm2) | Calc. P.D. (mW/cm2) | Max Calc. P.D. (mW/cm2) |        |
|--------------|----------------------|-----------------|---------------|-------------|-----------------|-----------|-------------|-------------------|-----|------------------|--------------------------|-------|-------|-------|--------|--------|--------|--------|--------------------|-------------------------|---------------------|-------------------------|--------|
| Ant Loc.     | Ant. Model/ Desc.    | Ant. Gain (dBi) | Tx Freq (MHz) | Max Pwr (W) | Initial Pwr (W) | Test Mode | E/H Field   | Probe Cal. Factor |     | Test Pos.        | Bystander (BS) Positions |       |       |       |        |        |        |        |                    |                         |                     |                         |        |
|              |                      |                 |               |             |                 |           |             |                   |     |                  | 20 cm                    | 40 cm | 60 cm | 80 cm | 100 cm | 120 cm | 140 cm | 160 cm |                    |                         |                     |                         | 180 cm |
| Roof         | HAE6011A,380-433MHz  | 7.15            | 380.0125      | 48.0        | 47.6            | CW        | E           | 1.09              | BS5 | 0.002            | 0.002                    | 0.002 | 0.008 | 0.015 | 0.02   | 0.025  | 0.03   | 0.041  | 0.054              | 0.5                     | 0.022               | 0.011                   | 0.01   |
| Roof         | HAE6011A,380-433MHz  | 7.15            | 393.0125      | 48.0        | 47.6            | CW        | E           | 1.11              | BS5 | 0.002            | 0.003                    | 0.004 | 0.005 | 0.006 | 0.007  | 0.02   | 0.03   | 0.051  | 0.061              | 0.5                     | 0.021               | 0.010                   | 0.01   |
| Roof         | HAE6011A,380-433MHz  | 7.15            | 406.5000      | 48.0        | 47.1            | CW        | E           | 1.11              | BS5 | 0.001            | 0.001                    | 0.002 | 0.002 | 0.007 | 0.018  | 0.03   | 0.036  | 0.045  | 0.058              | 0.5                     | 0.022               | 0.011                   | 0.01   |
| Roof         | HAE6011A,380-433MHz  | 7.15            | 419.5000      | 48.0        | 47.4            | CW        | E           | 1.07              | BS5 | 0.001            | 0.001                    | 0.002 | 0.006 | 0.011 | 0.02   | 0.023  | 0.031  | 0.041  | 0.052              | 0.5                     | 0.020               | 0.010                   | 0.01   |
| Roof         | HAE6011A,380-433MHz  | 7.15            | 432.9875      | 48.0        | 46.6            | CW        | E           | 1.04              | BS5 | 0.001            | 0.001                    | 0.001 | 0.004 | 0.006 | 0.01   | 0.02   | 0.018  | 0.022  | 0.03               | 0.5                     | 0.011               | 0.006                   | 0.01   |
| Roof         | HAE6012A, 380-433MHz | 2.15            | 380.0125      | 48.0        | 47.6            | CW        | E           | 1.09              | BS1 | 0.018            | 0.021                    | 0.02  | 0.026 | 0.04  | 0.06   | 0.082  | 0.105  | 0.124  | 0.148              | 0.5                     | 0.070               | 0.035                   | 0.04   |
| Roof         | HAE6012A, 380-433MHz | 2.15            | 393.0125      | 48.0        | 47.6            | CW        | E           | 1.11              | BS1 | 0.016            | 0.013                    | 0.014 | 0.021 | 0.031 | 0.051  | 0.078  | 0.098  | 0.121  | 0.123              | 0.5                     | 0.063               | 0.031                   | 0.03   |
| Roof         | HAE6012A, 380-433MHz | 2.15            | 406.5000      | 48.0        | 47.1            | CW        | E           | 1.11              | BS1 | 0.004            | 0.005                    | 0.014 | 0.018 | 0.027 | 0.04   | 0.07   | 0.095  | 0.124  | 0.13               | 0.5                     | 0.058               | 0.029                   | 0.03   |
| Roof         | HAE6012A, 380-433MHz | 2.15            | 419.5000      | 48.0        | 47.4            | CW        | E           | 1.07              | BS1 | 0.008            | 0.006                    | 0.018 | 0.023 | 0.026 | 0.036  | 0.065  | 0.082  | 0.108  | 0.098              | 0.5                     | 0.050               | 0.025                   | 0.03   |
| Roof         | HAE6012A, 380-433MHz | 2.15            | 432.9875      | 48.0        | 46.6            | CW        | E           | 1.04              | BS1 | 0.005            | 0.019                    | 0.018 | 0.017 | 0.022 | 0.027  | 0.04   | 0.068  | 0.102  | 0.13               | 0.5                     | 0.047               | 0.023                   | 0.02   |
| Roof         | HAE6012A, 380-433MHz | 2.15            | 380.0125      | 48.0        | 47.6            | CW        | E           | 1.09              | BS2 | 0.013            | 0.017                    | 0.018 | 0.02  | 0.028 | 0.05   | 0.067  | 0.08   | 0.085  | 0.088              | 0.5                     | 0.051               | 0.025                   | 0.03   |
| Roof         | HAE6012A, 380-433MHz | 2.15            | 393.0125      | 48.0        | 47.6            | CW        | E           | 1.11              | BS2 | 0.016            | 0.024                    | 0.026 | 0.03  | 0.028 | 0.038  | 0.05   | 0.052  | 0.08   | 0.082              | 0.5                     | 0.047               | 0.024                   | 0.02   |
| Roof         | HAE6012A, 380-433MHz | 2.15            | 406.5000      | 48.0        | 47.1            | CW        | E           | 1.11              | BS2 | 0.016            | 0.025                    | 0.018 | 0.02  | 0.022 | 0.026  | 0.036  | 0.044  | 0.063  | 0.073              | 0.5                     | 0.038               | 0.019                   | 0.02   |
| Roof         | HAE6012A, 380-433MHz | 2.15            | 419.5000      | 48.0        | 47.4            | CW        | E           | 1.07              | BS2 | 0.012            | 0.013                    | 0.015 | 0.017 | 0.026 | 0.04   | 0.051  | 0.068  | 0.075  | 0.088              | 0.5                     | 0.043               | 0.022                   | 0.02   |
| Roof         | HAE6012A, 380-433MHz | 2.15            | 432.9875      | 48.0        | 46.6            | CW        | E           | 1.04              | BS2 | 0.005            | 0.008                    | 0.015 | 0.013 | 0.016 | 0.02   | 0.03   | 0.048  | 0.063  | 0.09               | 0.5                     | 0.032               | 0.016                   | 0.02   |

Notes:

MPE calculations are defined in section 15.0

Blue fonts: Frequencies not regulated by FCC.

**Table F.1 (Continued)**  
**APX6500 UHF R1 - MPE measurement data for Bystander**

| D.U.T. Info. |                      |                 |               |             |                 |           | Probe Info. |                   | Test Pos. | MPE Measurements         |       |       |       |        |        |        |        |        |        | DUT Max. TX Factor | Avg. over Body (mW/cm2) | Calc. P.D. (mW/cm2) | Max Calc. P.D. (mW/cm2) |
|--------------|----------------------|-----------------|---------------|-------------|-----------------|-----------|-------------|-------------------|-----------|--------------------------|-------|-------|-------|--------|--------|--------|--------|--------|--------|--------------------|-------------------------|---------------------|-------------------------|
| Ant Loc.     | Ant. Model/ Desc.    | Ant. Gain (dBi) | Tx Freq (MHz) | Max Pwr (W) | Initial Pwr (W) | Test Mode | E/H Field   | Probe Cal. Factor |           | Bystander (BS) Positions |       |       |       |        |        |        |        |        |        |                    |                         |                     |                         |
|              |                      |                 |               |             |                 |           |             |                   |           | 20 cm                    | 40 cm | 60 cm | 80 cm | 100 cm | 120 cm | 140 cm | 160 cm | 180 cm | 200 cm |                    |                         |                     |                         |
| Roof         | HAE6012A, 380-433MHz | 2.15            | 380.0125      | 48.0        | 47.6            | CW        | E           | 1.09              | BS3       | 0.018                    | 0.024 | 0.026 | 0.038 | 0.033  | 0.026  | 0.028  | 0.033  | 0.037  | 0.055  | 0.5                | 0.035                   | 0.017               | 0.02                    |
| Roof         | HAE6012A, 380-433MHz | 2.15            | 393.0125      | 48.0        | 47.6            | CW        | E           | 1.11              | BS3       | 0.016                    | 0.021 | 0.028 | 0.04  | 0.042  | 0.05   | 0.038  | 0.04   | 0.046  | 0.058  | 0.5                | 0.042                   | 0.021               | 0.02                    |
| Roof         | HAE6012A, 380-433MHz | 2.15            | 406.5000      | 48.0        | 47.1            | CW        | E           | 1.11              | BS3       | 0.016                    | 0.018 | 0.02  | 0.037 | 0.04   | 0.045  | 0.046  | 0.06   | 0.066  | 0.08   | 0.5                | 0.048                   | 0.024               | 0.02                    |
| Roof         | HAE6012A, 380-433MHz | 2.15            | 419.5000      | 48.0        | 47.4            | CW        | E           | 1.07              | BS3       | 0.017                    | 0.018 | 0.02  | 0.026 | 0.024  | 0.026  | 0.03   | 0.052  | 0.064  | 0.068  | 0.5                | 0.037                   | 0.018               | 0.02                    |
| Roof         | HAE6012A, 380-433MHz | 2.15            | 432.9875      | 48.0        | 46.6            | CW        | E           | 1.04              | BS3       | 0.018                    | 0.02  | 0.024 | 0.028 | 0.025  | 0.03   | 0.04   | 0.05   | 0.064  | 0.07   | 0.5                | 0.038                   | 0.019               | 0.02                    |
| Roof         | HAE6012A, 380-433MHz | 2.15            | 380.0125      | 48.0        | 47.6            | CW        | E           | 1.09              | BS4       | 0.005                    | 0.007 | 0.01  | 0.016 | 0.024  | 0.034  | 0.03   | 0.025  | 0.026  | 0.036  | 0.5                | 0.023                   | 0.012               | 0.01                    |
| Roof         | HAE6012A, 380-433MHz | 2.15            | 393.0125      | 48.0        | 47.6            | CW        | E           | 1.11              | BS4       | 0.005                    | 0.006 | 0.005 | 0.008 | 0.022  | 0.03   | 0.034  | 0.032  | 0.033  | 0.042  | 0.5                | 0.024                   | 0.012               | 0.01                    |
| Roof         | HAE6012A, 380-433MHz | 2.15            | 406.5000      | 48.0        | 47.1            | CW        | E           | 1.11              | BS4       | 0.011                    | 0.012 | 0.005 | 0.012 | 0.022  | 0.024  | 0.026  | 0.027  | 0.032  | 0.04   | 0.5                | 0.023                   | 0.012               | 0.01                    |
| Roof         | HAE6012A, 380-433MHz | 2.15            | 419.5000      | 48.0        | 47.4            | CW        | E           | 1.07              | BS4       | 0.013                    | 0.014 | 0.012 | 0.017 | 0.025  | 0.034  | 0.03   | 0.026  | 0.028  | 0.036  | 0.5                | 0.025                   | 0.013               | 0.01                    |
| Roof         | HAE6012A, 380-433MHz | 2.15            | 432.9875      | 48.0        | 46.6            | CW        | E           | 1.04              | BS4       | 0.006                    | 0.01  | 0.014 | 0.016 | 0.021  | 0.027  | 0.03   | 0.024  | 0.027  | 0.03   | 0.5                | 0.021                   | 0.011               | 0.01                    |
| Roof         | HAE6012A, 380-433MHz | 2.15            | 380.0125      | 48.0        | 47.6            | CW        | E           | 1.09              | BS5       | 0.001                    | 0.001 | 0.001 | 0.002 | 0.006  | 0.012  | 0.014  | 0.017  | 0.018  | 0.021  | 0.5                | 0.010                   | 0.005               | 0.01                    |
| Roof         | HAE6012A, 380-433MHz | 2.15            | 393.0125      | 48.0        | 47.6            | CW        | E           | 1.11              | BS5       | 0.001                    | 0.002 | 0.002 | 0.002 | 0.002  | 0.004  | 0.006  | 0.017  | 0.027  | 0.037  | 0.5                | 0.011                   | 0.006               | 0.01                    |
| Roof         | HAE6012A, 380-433MHz | 2.15            | 406.5000      | 48.0        | 47.1            | CW        | E           | 1.11              | BS5       | 0.001                    | 0.002 | 0.003 | 0.004 | 0.015  | 0.017  | 0.02   | 0.022  | 0.025  | 0.032  | 0.5                | 0.016                   | 0.008               | 0.01                    |
| Roof         | HAE6012A, 380-433MHz | 2.15            | 419.5000      | 48.0        | 47.4            | CW        | E           | 1.07              | BS5       | 0.001                    | 0.005 | 0.006 | 0.007 | 0.01   | 0.023  | 0.027  | 0.03   | 0.032  | 0.035  | 0.5                | 0.019                   | 0.009               | 0.01                    |
| Roof         | HAE6012A, 380-433MHz | 2.15            | 432.9875      | 48.0        | 46.6            | CW        | E           | 1.04              | BS5       | 0.002                    | 0.002 | 0.002 | 0.002 | 0.007  | 0.021  | 0.03   | 0.025  | 0.024  | 0.03   | 0.5                | 0.015                   | 0.007               | 0.01                    |

Notes:

MPE calculations are defined in section 15.0

Blue fonts: Frequencies not regulated by FCC.

Table F.1 (Continued)

## APX6500 UHF R1 - MPE measurement data for Bystander

| D.U.T. Info. |                      |                 |               |             |                 |           | Probe Info. |                   | Test Pos. | MPE Measurements         |       |       |       |        |        |        |        |        |        | DUT Max. TX Factor | Avg. over Body (mW/cm2) | Calc. P.D. (mW/cm2) | Max Calc. P.D. (mW/cm2) |
|--------------|----------------------|-----------------|---------------|-------------|-----------------|-----------|-------------|-------------------|-----------|--------------------------|-------|-------|-------|--------|--------|--------|--------|--------|--------|--------------------|-------------------------|---------------------|-------------------------|
| Ant Loc.     | Ant. Model/ Desc.    | Ant. Gain (dBi) | Tx Freq (MHz) | Max Pwr (W) | Initial Pwr (W) | Test Mode | E/H Field   | Probe Cal. Factor |           | Bystander (BS) Positions |       |       |       |        |        |        |        |        |        |                    |                         |                     |                         |
|              |                      |                 |               |             |                 |           |             |                   |           | 20 cm                    | 40 cm | 60 cm | 80 cm | 100 cm | 120 cm | 140 cm | 160 cm | 180 cm | 200 cm |                    |                         |                     |                         |
| Roof         | HAE6013A, 380-470MHz | 4.15            | 380.0125      | 48.0        | 47.6            | CW        | E           | 1.09              | BS1       | 0.014                    | 0.018 | 0.02  | 0.025 | 0.032  | 0.054  | 0.072  | 0.092  | 0.11   | 0.121  | 0.5                | 0.061                   | 0.030               | 0.03                    |
| Roof         | HAE6013A, 380-470MHz | 4.15            | 393.0125      | 48.0        | 47.6            | CW        | E           | 1.11              | BS1       | 0.013                    | 0.016 | 0.018 | 0.022 | 0.028  | 0.057  | 0.073  | 0.095  | 0.104  | 0.109  | 0.5                | 0.059                   | 0.030               | 0.03                    |
| Roof         | HAE6013A, 380-470MHz | 4.15            | 406.5000      | 48.0        | 47.1            | CW        | E           | 1.11              | BS1       | 0.005                    | 0.007 | 0.015 | 0.025 | 0.026  | 0.047  | 0.1    | 0.11   | 0.124  | 0.127  | 0.5                | 0.065                   | 0.033               | 0.03                    |
| Roof         | HAE6013A, 380-470MHz | 4.15            | 422.0125      | 48.0        | 47.3            | CW        | E           | 1.07              | BS1       | 0.01                     | 0.012 | 0.023 | 0.032 | 0.04   | 0.052  | 0.067  | 0.09   | 0.12   | 0.127  | 0.5                | 0.061                   | 0.031               | 0.03                    |
| Roof         | HAE6013A, 380-470MHz | 4.15            | 438.0125      | 48.0        | 46.7            | CW        | E           | 1.03              | BS1       | 0.011                    | 0.013 | 0.014 | 0.016 | 0.03   | 0.042  | 0.077  | 0.11   | 0.123  | 0.145  | 0.5                | 0.060                   | 0.030               | 0.03                    |
| Roof         | HAE6013A, 380-470MHz | 4.15            | 450.0125      | 48.0        | 46.8            | CW        | E           | 1.00              | BS1       | 0.006                    | 0.007 | 0.008 | 0.013 | 0.025  | 0.052  | 0.078  | 0.11   | 0.12   | 0.112  | 0.5                | 0.053                   | 0.027               | 0.03                    |
| Roof         | HAE6013A, 380-470MHz | 4.15            | 469.9875      | 48.0        | 47.4            | CW        | E           | 0.95              | BS1       | 0.006                    | 0.007 | 0.01  | 0.013 | 0.024  | 0.031  | 0.07   | 0.095  | 0.105  | 0.10   | 0.5                | 0.044                   | 0.022               | 0.02                    |
| Roof         | HAE6013A, 380-470MHz | 4.15            | 380.0125      | 48.0        | 47.6            | CW        | E           | 1.09              | BS2       | 0.011                    | 0.016 | 0.018 | 0.02  | 0.022  | 0.035  | 0.056  | 0.064  | 0.08   | 0.078  | 0.5                | 0.044                   | 0.022               | 0.02                    |
| Roof         | HAE6013A, 380-470MHz | 4.15            | 393.0125      | 48.0        | 47.6            | CW        | E           | 1.11              | BS2       | 0.014                    | 0.023 | 0.025 | 0.03  | 0.026  | 0.036  | 0.05   | 0.052  | 0.07   | 0.072  | 0.5                | 0.044                   | 0.022               | 0.02                    |
| Roof         | HAE6013A, 380-470MHz | 4.15            | 406.5000      | 48.0        | 47.1            | CW        | E           | 1.11              | BS2       | 0.015                    | 0.02  | 0.022 | 0.024 | 0.033  | 0.03   | 0.038  | 0.047  | 0.05   | 0.076  | 0.5                | 0.039                   | 0.020               | 0.02                    |
| Roof         | HAE6013A, 380-470MHz | 4.15            | 422.0125      | 48.0        | 47.3            | CW        | E           | 1.07              | BS2       | 0.01                     | 0.013 | 0.015 | 0.02  | 0.023  | 0.047  | 0.065  | 0.076  | 0.09   | 0.094  | 0.5                | 0.048                   | 0.024               | 0.02                    |
| Roof         | HAE6013A, 380-470MHz | 4.15            | 438.0125      | 48.0        | 46.7            | CW        | E           | 1.03              | BS2       | 0.015                    | 0.017 | 0.017 | 0.018 | 0.025  | 0.046  | 0.067  | 0.076  | 0.111  | 0.107  | 0.5                | 0.051                   | 0.026               | 0.03                    |
| Roof         | HAE6013A, 380-470MHz | 4.15            | 450.0125      | 48.0        | 46.8            | CW        | E           | 1.00              | BS2       | 0.012                    | 0.013 | 0.015 | 0.018 | 0.022  | 0.034  | 0.05   | 0.068  | 0.107  | 0.105  | 0.5                | 0.044                   | 0.022               | 0.02                    |
| Roof         | HAE6013A, 380-470MHz | 4.15            | 469.9875      | 48.0        | 47.4            | CW        | E           | 0.95              | BS2       | 0.006                    | 0.007 | 0.01  | 0.018 | 0.02   | 0.037  | 0.06   | 0.08   | 0.082  | 0.09   | 0.5                | 0.038                   | 0.019               | 0.02                    |
| Roof         | HAE6013A, 380-470MHz | 4.15            | 380.0125      | 48.0        | 47.6            | CW        | E           | 1.09              | BS3       | 0.016                    | 0.02  | 0.02  | 0.027 | 0.028  | 0.03   | 0.025  | 0.027  | 0.035  | 0.048  | 0.5                | 0.030                   | 0.015               | 0.02                    |
| Roof         | HAE6013A, 380-470MHz | 4.15            | 393.0125      | 48.0        | 47.6            | CW        | E           | 1.11              | BS3       | 0.018                    | 0.02  | 0.025 | 0.04  | 0.041  | 0.043  | 0.04   | 0.043  | 0.048  | 0.06   | 0.5                | 0.042                   | 0.021               | 0.02                    |
| Roof         | HAE6013A, 380-470MHz | 4.15            | 406.5000      | 48.0        | 47.1            | CW        | E           | 1.11              | BS3       | 0.02                     | 0.021 | 0.027 | 0.038 | 0.046  | 0.054  | 0.052  | 0.07   | 0.085  | 0.092  | 0.5                | 0.056                   | 0.028               | 0.03                    |
| Roof         | HAE6013A, 380-470MHz | 4.15            | 422.0125      | 48.0        | 47.3            | CW        | E           | 1.07              | BS3       | 0.02                     | 0.021 | 0.023 | 0.03  | 0.022  | 0.024  | 0.034  | 0.052  | 0.077  | 0.078  | 0.5                | 0.041                   | 0.020               | 0.02                    |

Notes:

MPE calculations are defined in section 15.0

Blue fonts: Frequencies not regulated by FCC.



**Table F.1 (Continued)**  
**APX6500 UHF R1 - MPE measurement data for Bystander**

| D.U.T. Info. |                      |                 |               |             |                 |           | Probe Info. |                   | Test Pos. | MPE Measurements         |       |       |       |        |        |        |        |        |        | DUT Max. TX Factor | Avg. over Body (mW/cm2) | Calc. P.D. (mW/cm2) | Max Calc. P.D. (mW/cm2) |
|--------------|----------------------|-----------------|---------------|-------------|-----------------|-----------|-------------|-------------------|-----------|--------------------------|-------|-------|-------|--------|--------|--------|--------|--------|--------|--------------------|-------------------------|---------------------|-------------------------|
| Ant Loc.     | Ant. Model/ Desc.    | Ant. Gain (dBi) | Tx Freq (MHz) | Max Pwr (W) | Initial Pwr (W) | Test Mode | E/H Field   | Probe Cal. Factor |           | Bystander (BS) Positions |       |       |       |        |        |        |        |        |        |                    |                         |                     |                         |
|              |                      |                 |               |             |                 |           |             |                   |           | 20 cm                    | 40 cm | 60 cm | 80 cm | 100 cm | 120 cm | 140 cm | 160 cm | 180 cm | 200 cm |                    |                         |                     |                         |
| Roof         | HAE6013A, 380-470MHz | 4.15            | 438.0125      | 48.0        | 46.7            | CW        | E           | 1.03              | BS3       | 0.017                    | 0.018 | 0.022 | 0.024 | 0.02   | 0.024  | 0.031  | 0.044  | 0.066  | 0.09   | 0.5                | 0.037                   | 0.018               | 0.02                    |
| Roof         | HAE6013A, 380-470MHz | 4.15            | 450.0125      | 48.0        | 46.8            | CW        | E           | 1.00              | BS3       | 0.011                    | 0.014 | 0.02  | 0.024 | 0.034  | 0.038  | 0.056  | 0.07   | 0.071  | 0.07   | 0.5                | 0.041                   | 0.020               | 0.02                    |
| Roof         | HAE6013A, 380-470MHz | 4.15            | 469.9875      | 48.0        | 47.4            | CW        | E           | 0.95              | BS3       | 0.008                    | 0.016 | 0.021 | 0.025 | 0.03   | 0.036  | 0.03   | 0.044  | 0.048  | 0.06   | 0.5                | 0.031                   | 0.015               | 0.02                    |
| Roof         | HAE6013A, 380-470MHz | 4.15            | 380.0125      | 48.0        | 47.6            | CW        | E           | 1.09              | BS4       | 0.003                    | 0.005 | 0.007 | 0.013 | 0.023  | 0.028  | 0.027  | 0.025  | 0.023  | 0.03   | 0.5                | 0.020                   | 0.010               | 0.01                    |
| Roof         | HAE6013A, 380-470MHz | 4.15            | 393.0125      | 48.0        | 47.6            | CW        | E           | 1.11              | BS4       | 0.006                    | 0.008 | 0.007 | 0.01  | 0.023  | 0.03   | 0.033  | 0.03   | 0.032  | 0.043  | 0.5                | 0.025                   | 0.012               | 0.01                    |
| Roof         | HAE6013A, 380-470MHz | 4.15            | 406.5000      | 48.0        | 47.1            | CW        | E           | 1.11              | BS4       | 0.011                    | 0.012 | 0.01  | 0.013 | 0.021  | 0.028  | 0.028  | 0.03   | 0.035  | 0.043  | 0.5                | 0.026                   | 0.013               | 0.01                    |
| Roof         | HAE6013A, 380-470MHz | 4.15            | 422.0125      | 48.0        | 47.3            | CW        | E           | 1.07              | BS4       | 0.014                    | 0.018 | 0.017 | 0.03  | 0.04   | 0.044  | 0.035  | 0.024  | 0.026  | 0.044  | 0.5                | 0.031                   | 0.016               | 0.02                    |
| Roof         | HAE6013A, 380-470MHz | 4.15            | 438.0125      | 48.0        | 46.7            | CW        | E           | 1.03              | BS4       | 0.005                    | 0.006 | 0.008 | 0.02  | 0.028  | 0.03   | 0.026  | 0.025  | 0.03   | 0.036  | 0.5                | 0.022                   | 0.011               | 0.01                    |
| Roof         | HAE6013A, 380-470MHz | 4.15            | 450.0125      | 48.0        | 46.8            | CW        | E           | 1.00              | BS4       | 0.01                     | 0.012 | 0.01  | 0.017 | 0.026  | 0.036  | 0.033  | 0.034  | 0.036  | 0.042  | 0.5                | 0.026                   | 0.013               | 0.01                    |
| Roof         | HAE6013A, 380-470MHz | 4.15            | 469.9875      | 48.0        | 47.4            | CW        | E           | 0.95              | BS4       | 0.007                    | 0.008 | 0.01  | 0.02  | 0.035  | 0.046  | 0.03   | 0.033  | 0.034  | 0.04   | 0.5                | 0.025                   | 0.013               | 0.01                    |
| Roof         | HAE6013A, 380-470MHz | 4.15            | 380.0125      | 48.0        | 47.6            | CW        | E           | 1.09              | BS5       | 0.001                    | 0.002 | 0.002 | 0.002 | 0.003  | 0.005  | 0.007  | 0.008  | 0.01   | 0.02   | 0.5                | 0.007                   | 0.003               | 0.00                    |
| Roof         | HAE6013A, 380-470MHz | 4.15            | 393.0125      | 48.0        | 47.6            | CW        | E           | 1.11              | BS5       | 0.001                    | 0.001 | 0.001 | 0.002 | 0.003  | 0.005  | 0.007  | 0.018  | 0.028  | 0.037  | 0.5                | 0.011                   | 0.006               | 0.01                    |
| Roof         | HAE6013A, 380-470MHz | 4.15            | 406.5000      | 48.0        | 47.1            | CW        | E           | 1.11              | BS5       | 0.001                    | 0.001 | 0.003 | 0.01  | 0.017  | 0.02   | 0.022  | 0.025  | 0.028  | 0.04   | 0.5                | 0.019                   | 0.009               | 0.01                    |
| Roof         | HAE6013A, 380-470MHz | 4.15            | 422.0125      | 48.0        | 47.3            | CW        | E           | 1.07              | BS5       | 0.001                    | 0.002 | 0.003 | 0.007 | 0.01   | 0.024  | 0.035  | 0.043  | 0.044  | 0.05   | 0.5                | 0.023                   | 0.012               | 0.01                    |
| Roof         | HAE6013A, 380-470MHz | 4.15            | 438.0125      | 48.0        | 46.7            | CW        | E           | 1.03              | BS5       | 0.002                    | 0.003 | 0.003 | 0.004 | 0.013  | 0.026  | 0.033  | 0.041  | 0.048  | 0.056  | 0.5                | 0.024                   | 0.012               | 0.01                    |
| Roof         | HAE6013A, 380-470MHz | 4.15            | 450.0125      | 48.0        | 46.8            | CW        | E           | 1.00              | BS5       | 0.001                    | 0.001 | 0.003 | 0.006 | 0.016  | 0.024  | 0.023  | 0.022  | 0.035  | 0.047  | 0.5                | 0.018                   | 0.009               | 0.01                    |
| Roof         | HAE6013A, 380-470MHz | 4.15            | 469.9875      | 48.0        | 47.4            | CW        | E           | 0.95              | BS5       | 0.001                    | 0.001 | 0.003 | 0.005 | 0.007  | 0.013  | 0.03   | 0.03   | 0.022  | 0.03   | 0.5                | 0.013                   | 0.006               | 0.01                    |

Notes:

MPE calculations are defined in section 15.0  
 Blue fonts: Frequencies not regulated by FCC.

**Table F.1 (Continued)**  
**APX6500 UHF R1 - MPE measurement data for Bystander**

| D.U.T. Info. |                      |                 |               |             |                 |           | Probe Info. |                   | Test Pos. | MPE Measurements         |       |       |       |        |        |        |        |        |        | DUT Max. TX Factor | Avg. over Body (mW/cm2) | Calc. P.D. (mW/cm2) | Max Calc. P.D. (mW/cm2) |
|--------------|----------------------|-----------------|---------------|-------------|-----------------|-----------|-------------|-------------------|-----------|--------------------------|-------|-------|-------|--------|--------|--------|--------|--------|--------|--------------------|-------------------------|---------------------|-------------------------|
| Ant Loc.     | Ant. Model/ Desc.    | Ant. Gain (dBi) | Tx Freq (MHz) | Max Pwr (W) | Initial Pwr (W) | Test Mode | E/H Field   | Probe Cal. Factor |           | Bystander (BS) Positions |       |       |       |        |        |        |        |        |        |                    |                         |                     |                         |
|              |                      |                 |               |             |                 |           |             |                   |           | 20 cm                    | 40 cm | 60 cm | 80 cm | 100 cm | 120 cm | 140 cm | 160 cm | 180 cm | 200 cm |                    |                         |                     |                         |
| Roof         | HAE6015A, 450-520MHz | 4.15            | 450.0125      | 48.0        | 46.8            | CW        | E           | 1.00              | BS1       | 0.005                    | 0.007 | 0.01  | 0.017 | 0.028  | 0.051  | 0.085  | 0.115  | 0.135  | 0.111  | 0.5                | 0.056                   | 0.028               | 0.03                    |
| Roof         | HAE6015A, 450-520MHz | 4.15            | 460.0000      | 48.0        | 47.0            | CW        | E           | 0.98              | BS1       | 0.005                    | 0.005 | 0.02  | 0.027 | 0.034  | 0.051  | 0.072  | 0.105  | 0.126  | 0.157  | 0.5                | 0.059                   | 0.029               | 0.03                    |
| Roof         | HAE6015A, 450-520MHz | 4.15            | 469.9875      | 48.0        | 47.4            | CW        | E           | 0.95              | BS1       | 0.011                    | 0.017 | 0.016 | 0.018 | 0.03   | 0.05   | 0.078  | 0.117  | 0.132  | 0.113  | 0.5                | 0.055                   | 0.028               | 0.03                    |
| Roof         | HAE6015A, 450-520MHz | 4.15            | 450.0125      | 48.0        | 46.8            | CW        | E           | 1.00              | BS2       | 0.011                    | 0.018 | 0.016 | 0.017 | 0.025  | 0.042  | 0.06   | 0.085  | 0.108  | 0.128  | 0.5                | 0.051                   | 0.026               | 0.03                    |
| Roof         | HAE6015A, 450-520MHz | 4.15            | 460.0000      | 48.0        | 47.0            | CW        | E           | 0.98              | BS2       | 0.014                    | 0.02  | 0.018 | 0.019 | 0.027  | 0.045  | 0.064  | 0.1    | 0.122  | 0.113  | 0.5                | 0.053                   | 0.027               | 0.03                    |
| Roof         | HAE6015A, 450-520MHz | 4.15            | 469.9875      | 48.0        | 47.4            | CW        | E           | 0.95              | BS2       | 0.007                    | 0.009 | 0.014 | 0.018 | 0.02   | 0.046  | 0.061  | 0.092  | 0.103  | 0.1    | 0.5                | 0.045                   | 0.022               | 0.02                    |
| Roof         | HAE6015A, 450-520MHz | 4.15            | 450.0125      | 48.0        | 46.8            | CW        | E           | 1.00              | BS3       | 0.01                     | 0.014 | 0.018 | 0.022 | 0.024  | 0.025  | 0.05   | 0.057  | 0.067  | 0.063  | 0.5                | 0.035                   | 0.018               | 0.02                    |
| Roof         | HAE6015A, 450-520MHz | 4.15            | 460.0000      | 48.0        | 47.0            | CW        | E           | 0.98              | BS3       | 0.011                    | 0.013 | 0.02  | 0.03  | 0.031  | 0.033  | 0.046  | 0.061  | 0.065  | 0.078  | 0.5                | 0.038                   | 0.019               | 0.02                    |
| Roof         | HAE6015A, 450-520MHz | 4.15            | 469.9875      | 48.0        | 47.4            | CW        | E           | 0.95              | BS3       | 0.01                     | 0.014 | 0.023 | 0.025 | 0.04   | 0.042  | 0.04   | 0.057  | 0.057  | 0.074  | 0.5                | 0.036                   | 0.018               | 0.02                    |
| Roof         | HAE6015A, 450-520MHz | 4.15            | 450.0125      | 48.0        | 46.8            | CW        | E           | 1.00              | BS4       | 0.006                    | 0.012 | 0.01  | 0.017 | 0.03   | 0.034  | 0.032  | 0.03   | 0.035  | 0.041  | 0.5                | 0.025                   | 0.012               | 0.01                    |
| Roof         | HAE6015A, 450-520MHz | 4.15            | 460.0000      | 48.0        | 47.0            | CW        | E           | 0.98              | BS4       | 0.011                    | 0.014 | 0.01  | 0.014 | 0.017  | 0.023  | 0.032  | 0.036  | 0.033  | 0.04   | 0.5                | 0.023                   | 0.011               | 0.01                    |
| Roof         | HAE6015A, 450-520MHz | 4.15            | 469.9875      | 48.0        | 47.4            | CW        | E           | 0.95              | BS4       | 0.008                    | 0.012 | 0.01  | 0.023 | 0.033  | 0.04   | 0.042  | 0.033  | 0.037  | 0.05   | 0.5                | 0.027                   | 0.014               | 0.01                    |
| Roof         | HAE6015A, 450-520MHz | 4.15            | 450.0125      | 48.0        | 46.8            | CW        | E           | 1.00              | BS5       | 0.002                    | 0.002 | 0.004 | 0.008 | 0.015  | 0.023  | 0.028  | 0.03   | 0.034  | 0.046  | 0.5                | 0.019                   | 0.010               | 0.01                    |
| Roof         | HAE6015A, 450-520MHz | 4.15            | 460.0000      | 48.0        | 47.0            | CW        | E           | 0.98              | BS5       | 0.001                    | 0.002 | 0.002 | 0.003 | 0.011  | 0.026  | 0.031  | 0.025  | 0.022  | 0.03   | 0.5                | 0.015                   | 0.007               | 0.01                    |
| Roof         | HAE6015A, 450-520MHz | 4.15            | 469.9875      | 48.0        | 47.4            | CW        | E           | 0.95              | BS5       | 0.001                    | 0.001 | 0.001 | 0.005 | 0.007  | 0.016  | 0.026  | 0.028  | 0.026  | 0.03   | 0.5                | 0.013                   | 0.007               | 0.01                    |

Notes:

MPE calculations are defined in section 15.0

Table F.1 (Continued)

## APX6500 UHF R1 - MPE measurement data for Bystander

| D.U.T. Info. |                        |                 |               |             |                 |           | Probe Info. |                   | Test Pos. | MPE Measurements         |       |       |       |        |        |        |        |        |        | DUT Max. TX Factor | Avg. over Body (mW/cm2) | Calc. P.D. (mW/cm2) | Max Calc. P.D. (mW/cm2) |
|--------------|------------------------|-----------------|---------------|-------------|-----------------|-----------|-------------|-------------------|-----------|--------------------------|-------|-------|-------|--------|--------|--------|--------|--------|--------|--------------------|-------------------------|---------------------|-------------------------|
| Ant Loc.     | Ant. Model/ Desc.      | Ant. Gain (dBi) | Tx Freq (MHz) | Max Pwr (W) | Initial Pwr (W) | Test Mode | E/H Field   | Probe Cal. Factor |           | Bystander (BS) Positions |       |       |       |        |        |        |        |        |        |                    |                         |                     |                         |
|              |                        |                 |               |             |                 |           |             |                   |           | 20 cm                    | 40 cm | 60 cm | 80 cm | 100 cm | 120 cm | 140 cm | 160 cm | 180 cm | 200 cm |                    |                         |                     |                         |
| Roof         | HAE6016A, 450 - 512MHz | 2.15            | 450.0125      | 48.0        | 46.8            | CW        | E           | 1.00              | BS1       | 0.003                    | 0.004 | 0.007 | 0.008 | 0.02   | 0.04   | 0.047  | 0.085  | 0.096  | 0.117  | 0.5                | 0.043                   | 0.021               | 0.02                    |
| Roof         | HAE6016A, 450 - 512MHz | 2.15            | 460.0000      | 48.0        | 47.0            | CW        | E           | 0.98              | BS1       | 0.004                    | 0.005 | 0.012 | 0.016 | 0.023  | 0.033  | 0.048  | 0.067  | 0.095  | 0.105  | 0.5                | 0.040                   | 0.020               | 0.02                    |
| Roof         | HAE6016A, 450 - 512MHz | 2.15            | 469.9875      | 48.0        | 47.4            | CW        | E           | 0.95              | BS1       | 0.01                     | 0.011 | 0.012 | 0.013 | 0.022  | 0.036  | 0.056  | 0.082  | 0.1    | 0.096  | 0.5                | 0.042                   | 0.021               | 0.02                    |
| Roof         | HAE6016A, 450 - 512MHz | 2.15            | 450.0125      | 48.0        | 46.8            | CW        | E           | 1.00              | BS2       | 0.011                    | 0.012 | 0.016 | 0.017 | 0.018  | 0.03   | 0.042  | 0.06   | 0.083  | 0.1    | 0.5                | 0.039                   | 0.019               | 0.02                    |
| Roof         | HAE6016A, 450 - 512MHz | 2.15            | 460.0000      | 48.0        | 47.0            | CW        | E           | 0.98              | BS2       | 0.01                     | 0.016 | 0.015 | 0.016 | 0.02   | 0.031  | 0.048  | 0.072  | 0.1    | 0.116  | 0.5                | 0.044                   | 0.022               | 0.02                    |
| Roof         | HAE6016A, 450 - 512MHz | 2.15            | 469.9875      | 48.0        | 47.4            | CW        | E           | 0.95              | BS2       | 0.002                    | 0.006 | 0.011 | 0.012 | 0.02   | 0.032  | 0.054  | 0.072  | 0.097  | 0.094  | 0.5                | 0.038                   | 0.019               | 0.02                    |
| Roof         | HAE6016A, 450 - 512MHz | 2.15            | 450.0125      | 48.0        | 46.8            | CW        | E           | 1.00              | BS3       | 0.005                    | 0.007 | 0.012 | 0.015 | 0.016  | 0.022  | 0.032  | 0.042  | 0.044  | 0.048  | 0.5                | 0.024                   | 0.012               | 0.01                    |
| Roof         | HAE6016A, 450 - 512MHz | 2.15            | 460.0000      | 48.0        | 47.0            | CW        | E           | 0.98              | BS3       | 0.005                    | 0.007 | 0.014 | 0.016 | 0.021  | 0.025  | 0.034  | 0.038  | 0.045  | 0.056  | 0.5                | 0.026                   | 0.013               | 0.01                    |
| Roof         | HAE6016A, 450 - 512MHz | 2.15            | 469.9875      | 48.0        | 47.4            | CW        | E           | 0.95              | BS3       | 0.008                    | 0.009 | 0.02  | 0.022 | 0.025  | 0.027  | 0.033  | 0.036  | 0.04   | 0.053  | 0.5                | 0.026                   | 0.013               | 0.01                    |
| Roof         | HAE6016A, 450 - 512MHz | 2.15            | 450.0125      | 48.0        | 46.8            | CW        | E           | 1.00              | BS4       | 0.004                    | 0.006 | 0.01  | 0.014 | 0.02   | 0.024  | 0.025  | 0.026  | 0.028  | 0.033  | 0.5                | 0.019                   | 0.010               | 0.01                    |
| Roof         | HAE6016A, 450 - 512MHz | 2.15            | 460.0000      | 48.0        | 47.0            | CW        | E           | 0.98              | BS4       | 0.003                    | 0.01  | 0.01  | 0.012 | 0.014  | 0.016  | 0.026  | 0.027  | 0.025  | 0.03   | 0.5                | 0.017                   | 0.008               | 0.01                    |
| Roof         | HAE6016A, 450 - 512MHz | 2.15            | 469.9875      | 48.0        | 47.4            | CW        | E           | 0.95              | BS4       | 0.006                    | 0.008 | 0.012 | 0.014 | 0.02   | 0.027  | 0.028  | 0.025  | 0.022  | 0.032  | 0.5                | 0.018                   | 0.009               | 0.01                    |
| Roof         | HAE6016A, 450 - 512MHz | 2.15            | 450.0125      | 48.0        | 46.8            | CW        | E           | 1.00              | BS5       | 0.001                    | 0.002 | 0.002 | 0.005 | 0.007  | 0.018  | 0.02   | 0.018  | 0.024  | 0.032  | 0.5                | 0.013                   | 0.006               | 0.01                    |
| Roof         | HAE6016A, 450 - 512MHz | 2.15            | 460.0000      | 48.0        | 47.0            | CW        | E           | 0.98              | BS5       | 0.001                    | 0.001 | 0.003 | 0.004 | 0.006  | 0.018  | 0.021  | 0.02   | 0.018  | 0.021  | 0.5                | 0.011                   | 0.006               | 0.01                    |
| Roof         | HAE6016A, 450 - 512MHz | 2.15            | 469.9875      | 48.0        | 47.4            | CW        | E           | 0.95              | BS5       | 0.001                    | 0.001 | 0.001 | 0.003 | 0.004  | 0.006  | 0.023  | 0.024  | 0.023  | 0.022  | 0.5                | 0.010                   | 0.005               | 0.01                    |

Notes:

MPE calculations are defined in section 15.0

**Table F.1 (Continued)**  
**APX6500 UHF R1 - MPE measurement data for Bystander**

| D.U.T. Info. |                      |                 |               |             |                 |           | Probe Info. |                   | Test Pos. | MPE Measurements         |       |       |       |        |        |        |        |        |        | DUT Max. TX Factor | Avg. over Body (mW/cm2) | Calc. P.D. (mW/cm2) | Max Calc. P.D. (mW/cm2) |
|--------------|----------------------|-----------------|---------------|-------------|-----------------|-----------|-------------|-------------------|-----------|--------------------------|-------|-------|-------|--------|--------|--------|--------|--------|--------|--------------------|-------------------------|---------------------|-------------------------|
| Ant Loc.     | Ant. Model/ Desc.    | Ant. Gain (dBi) | Tx Freq (MHz) | Max Pwr (W) | Initial Pwr (W) | Test Mode | E/H Field   | Probe Cal. Factor |           | Bystander (BS) Positions |       |       |       |        |        |        |        |        |        |                    |                         |                     |                         |
|              |                      |                 |               |             |                 |           |             |                   |           | 20 cm                    | 40 cm | 60 cm | 80 cm | 100 cm | 120 cm | 140 cm | 160 cm | 180 cm | 200 cm |                    |                         |                     |                         |
| Roof         | HAE6031A, 380-520MHz | 4.15            | 380.0125      | 48.0        | 47.6            | CW        | E           | 1.09              | BS1       | 0.017                    | 0.026 | 0.023 | 0.026 | 0.042  | 0.055  | 0.082  | 0.106  | 0.12   | 0.145  | 0.5                | 0.070                   | 0.035               | 0.04                    |
| Roof         | HAE6031A, 380-520MHz | 4.15            | 393.0125      | 48.0        | 47.6            | CW        | E           | 1.11              | BS1       | 0.012                    | 0.016 | 0.018 | 0.022 | 0.03   | 0.054  | 0.074  | 0.098  | 0.11   | 0.114  | 0.5                | 0.061                   | 0.030               | 0.03                    |
| Roof         | HAE6031A, 380-520MHz | 4.15            | 406.5000      | 48.0        | 47.1            | CW        | E           | 1.11              | BS1       | 0.005                    | 0.01  | 0.014 | 0.02  | 0.024  | 0.04   | 0.071  | 0.11   | 0.121  | 0.123  | 0.5                | 0.060                   | 0.030               | 0.03                    |
| Roof         | HAE6031A, 380-520MHz | 4.15            | 422.0125      | 48.0        | 47.3            | CW        | E           | 1.07              | BS1       | 0.005                    | 0.007 | 0.022 | 0.036 | 0.038  | 0.046  | 0.073  | 0.09   | 0.114  | 0.125  | 0.5                | 0.059                   | 0.030               | 0.03                    |
| Roof         | HAE6031A, 380-520MHz | 4.15            | 438.0125      | 48.0        | 46.7            | CW        | E           | 1.03              | BS1       | 0.01                     | 0.018 | 0.019 | 0.022 | 0.027  | 0.045  | 0.076  | 0.098  | 0.13   | 0.11   | 0.5                | 0.057                   | 0.029               | 0.03                    |
| Roof         | HAE6031A, 380-520MHz | 4.15            | 450.0125      | 48.0        | 46.8            | CW        | E           | 1.00              | BS1       | 0.005                    | 0.006 | 0.012 | 0.014 | 0.03   | 0.062  | 0.081  | 0.127  | 0.132  | 0.152  | 0.5                | 0.062                   | 0.031               | 0.03                    |
| Roof         | HAE6031A, 380-520MHz | 4.15            | 469.9875      | 48.0        | 47.4            | CW        | E           | 0.95              | BS1       | 0.011                    | 0.014 | 0.015 | 0.016 | 0.04   | 0.05   | 0.077  | 0.112  | 0.133  | 0.128  | 0.5                | 0.057                   | 0.028               | 0.03                    |
| Roof         | HAE6031A, 380-520MHz | 4.15            | 380.0125      | 48.0        | 47.6            | CW        | E           | 1.09              | BS2       | 0.015                    | 0.02  | 0.018 | 0.023 | 0.025  | 0.051  | 0.062  | 0.083  | 0.092  | 0.095  | 0.5                | 0.053                   | 0.026               | 0.03                    |
| Roof         | HAE6031A, 380-520MHz | 4.15            | 393.0125      | 48.0        | 47.6            | CW        | E           | 1.11              | BS2       | 0.017                    | 0.02  | 0.021 | 0.022 | 0.024  | 0.035  | 0.048  | 0.062  | 0.07   | 0.073  | 0.5                | 0.044                   | 0.022               | 0.02                    |
| Roof         | HAE6031A, 380-520MHz | 4.15            | 406.5000      | 48.0        | 47.1            | CW        | E           | 1.11              | BS2       | 0.014                    | 0.017 | 0.02  | 0.026 | 0.027  | 0.028  | 0.037  | 0.046  | 0.065  | 0.08   | 0.5                | 0.040                   | 0.020               | 0.02                    |
| Roof         | HAE6031A, 380-520MHz | 4.15            | 422.0125      | 48.0        | 47.3            | CW        | E           | 1.07              | BS2       | 0.012                    | 0.015 | 0.016 | 0.018 | 0.025  | 0.034  | 0.054  | 0.075  | 0.092  | 0.1    | 0.5                | 0.047                   | 0.024               | 0.02                    |
| Roof         | HAE6031A, 380-520MHz | 4.15            | 438.0125      | 48.0        | 46.7            | CW        | E           | 1.03              | BS2       | 0.015                    | 0.02  | 0.017 | 0.02  | 0.023  | 0.045  | 0.061  | 0.097  | 0.116  | 0.112  | 0.5                | 0.054                   | 0.027               | 0.03                    |
| Roof         | HAE6031A, 380-520MHz | 4.15            | 450.0125      | 48.0        | 46.8            | CW        | E           | 1.00              | BS2       | 0.012                    | 0.016 | 0.015 | 0.017 | 0.02   | 0.046  | 0.061  | 0.09   | 0.11   | 0.113  | 0.5                | 0.050                   | 0.025               | 0.03                    |
| Roof         | HAE6031A, 380-520MHz | 4.15            | 469.9875      | 48.0        | 47.4            | CW        | E           | 0.95              | BS2       | 0.006                    | 0.011 | 0.014 | 0.023 | 0.03   | 0.042  | 0.072  | 0.103  | 0.121  | 0.122  | 0.5                | 0.052                   | 0.026               | 0.03                    |
| Roof         | HAE6031A, 380-520MHz | 4.15            | 380.0125      | 48.0        | 47.6            | CW        | E           | 1.09              | BS3       | 0.02                     | 0.025 | 0.022 | 0.031 | 0.03   | 0.028  | 0.028  | 0.032  | 0.042  | 0.056  | 0.5                | 0.034                   | 0.017               | 0.02                    |
| Roof         | HAE6031A, 380-520MHz | 4.15            | 393.0125      | 48.0        | 47.6            | CW        | E           | 1.11              | BS3       | 0.015                    | 0.017 | 0.021 | 0.036 | 0.041  | 0.038  | 0.04   | 0.045  | 0.05   | 0.063  | 0.5                | 0.041                   | 0.020               | 0.02                    |
| Roof         | HAE6031A, 380-520MHz | 4.15            | 406.5000      | 48.0        | 47.1            | CW        | E           | 1.11              | BS3       | 0.019                    | 0.02  | 0.025 | 0.038 | 0.046  | 0.055  | 0.053  | 0.063  | 0.08   | 0.093  | 0.5                | 0.055                   | 0.027               | 0.03                    |

Notes:

MPE calculations are defined in section 15.0  
 Blue fonts: Frequencies not regulated by FCC.

**Table F.1 (Continued)**  
**APX6500 UHF R1 - MPE measurement data for Bystander**

| D.U.T. Info. |                      |                 |               |             |                 |           | Probe Info. |                   | Test Pos. | MPE Measurements         |       |       |       |        |        |        |        |        |        | DUT Max. TX Factor | Avg. over Body (mW/cm2) | Calc. P.D. (mW/cm2) | Max Calc. P.D. (mW/cm2) |
|--------------|----------------------|-----------------|---------------|-------------|-----------------|-----------|-------------|-------------------|-----------|--------------------------|-------|-------|-------|--------|--------|--------|--------|--------|--------|--------------------|-------------------------|---------------------|-------------------------|
| Ant Loc.     | Ant. Model/ Desc.    | Ant. Gain (dBi) | Tx Freq (MHz) | Max Pwr (W) | Initial Pwr (W) | Test Mode | E/H Field   | Probe Cal. Factor |           | Bystander (BS) Positions |       |       |       |        |        |        |        |        |        |                    |                         |                     |                         |
|              |                      |                 |               |             |                 |           |             |                   |           | 20 cm                    | 40 cm | 60 cm | 80 cm | 100 cm | 120 cm | 140 cm | 160 cm | 180 cm | 200 cm |                    |                         |                     |                         |
| Roof         | HAE6031A, 380-520MHz | 4.15            | 422.0125      | 48.0        | 47.3            | CW        | E           | 1.07              | BS3       | 0.017                    | 0.02  | 0.023 | 0.032 | 0.031  | 0.027  | 0.032  | 0.05   | 0.068  | 0.075  | 0.5                | 0.040                   | 0.020               | 0.02                    |
| Roof         | HAE6031A, 380-520MHz | 4.15            | 438.0125      | 48.0        | 46.7            | CW        | E           | 1.03              | BS3       | 0.017                    | 0.018 | 0.02  | 0.024 | 0.02   | 0.025  | 0.031  | 0.042  | 0.063  | 0.085  | 0.5                | 0.036                   | 0.018               | 0.02                    |
| Roof         | HAE6031A, 380-520MHz | 4.15            | 450.0125      | 48.0        | 46.8            | CW        | E           | 1.00              | BS3       | 0.01                     | 0.015 | 0.02  | 0.022 | 0.032  | 0.038  | 0.055  | 0.066  | 0.07   | 0.074  | 0.5                | 0.040                   | 0.020               | 0.02                    |
| Roof         | HAE6031A, 380-520MHz | 4.15            | 469.9875      | 48.0        | 47.4            | CW        | E           | 0.95              | BS3       | 0.01                     | 0.018 | 0.025 | 0.027 | 0.03   | 0.042  | 0.04   | 0.048  | 0.056  | 0.075  | 0.5                | 0.035                   | 0.018               | 0.02                    |
| Roof         | HAE6031A, 380-520MHz | 4.15            | 380.0125      | 48.0        | 47.6            | CW        | E           | 1.09              | BS4       | 0.007                    | 0.008 | 0.011 | 0.015 | 0.024  | 0.031  | 0.03   | 0.026  | 0.027  | 0.036  | 0.5                | 0.023                   | 0.012               | 0.01                    |
| Roof         | HAE6031A, 380-520MHz | 4.15            | 393.0125      | 48.0        | 47.6            | CW        | E           | 1.11              | BS4       | 0.006                    | 0.007 | 0.008 | 0.01  | 0.021  | 0.03   | 0.031  | 0.032  | 0.034  | 0.042  | 0.5                | 0.025                   | 0.012               | 0.01                    |
| Roof         | HAE6031A, 380-520MHz | 4.15            | 406.5000      | 48.0        | 47.1            | CW        | E           | 1.11              | BS4       | 0.011                    | 0.012 | 0.01  | 0.012 | 0.023  | 0.024  | 0.026  | 0.028  | 0.033  | 0.04   | 0.5                | 0.024                   | 0.012               | 0.01                    |
| Roof         | HAE6031A, 380-520MHz | 4.15            | 422.0125      | 48.0        | 47.3            | CW        | E           | 1.07              | BS4       | 0.013                    | 0.017 | 0.02  | 0.027 | 0.035  | 0.037  | 0.035  | 0.028  | 0.03   | 0.04   | 0.5                | 0.030                   | 0.015               | 0.02                    |
| Roof         | HAE6031A, 380-520MHz | 4.15            | 438.0125      | 48.0        | 46.7            | CW        | E           | 1.03              | BS4       | 0.005                    | 0.007 | 0.01  | 0.02  | 0.028  | 0.031  | 0.027  | 0.025  | 0.03   | 0.034  | 0.5                | 0.022                   | 0.011               | 0.01                    |
| Roof         | HAE6031A, 380-520MHz | 4.15            | 450.0125      | 48.0        | 46.8            | CW        | E           | 1.00              | BS4       | 0.011                    | 0.012 | 0.015 | 0.02  | 0.026  | 0.036  | 0.034  | 0.035  | 0.037  | 0.044  | 0.5                | 0.027                   | 0.014               | 0.01                    |
| Roof         | HAE6031A, 380-520MHz | 4.15            | 469.9875      | 48.0        | 47.4            | CW        | E           | 0.95              | BS4       | 0.01                     | 0.01  | 0.017 | 0.024 | 0.04   | 0.042  | 0.04   | 0.04   | 0.042  | 0.05   | 0.5                | 0.030                   | 0.015               | 0.02                    |
| Roof         | HAE6031A, 380-520MHz | 4.15            | 380.0125      | 48.0        | 47.6            | CW        | E           | 1.09              | BS5       | 0.001                    | 0.002 | 0.001 | 0.001 | 0.003  | 0.005  | 0.007  | 0.01   | 0.013  | 0.021  | 0.5                | 0.007                   | 0.003               | 0.00                    |
| Roof         | HAE6031A, 380-520MHz | 4.15            | 393.0125      | 48.0        | 47.6            | CW        | E           | 1.11              | BS5       | 0.001                    | 0.001 | 0.001 | 0.001 | 0.001  | 0.006  | 0.008  | 0.018  | 0.03   | 0.041  | 0.5                | 0.012                   | 0.006               | 0.01                    |
| Roof         | HAE6031A, 380-520MHz | 4.15            | 406.5000      | 48.0        | 47.1            | CW        | E           | 1.11              | BS5       | 0.001                    | 0.001 | 0.002 | 0.004 | 0.015  | 0.02   | 0.022  | 0.024  | 0.033  | 0.04   | 0.5                | 0.018                   | 0.009               | 0.01                    |
| Roof         | HAE6031A, 380-520MHz | 4.15            | 422.0125      | 48.0        | 47.3            | CW        | E           | 1.07              | BS5       | 0.001                    | 0.003 | 0.005 | 0.006 | 0.007  | 0.021  | 0.026  | 0.041  | 0.042  | 0.048  | 0.5                | 0.021                   | 0.011               | 0.01                    |
| Roof         | HAE6031A, 380-520MHz | 4.15            | 438.0125      | 48.0        | 46.7            | CW        | E           | 1.03              | BS5       | 0.001                    | 0.001 | 0.001 | 0.005 | 0.015  | 0.027  | 0.03   | 0.033  | 0.044  | 0.05   | 0.5                | 0.021                   | 0.011               | 0.01                    |
| Roof         | HAE6031A, 380-520MHz | 4.15            | 450.0125      | 48.0        | 46.8            | CW        | E           | 1.00              | BS5       | 0.001                    | 0.002 | 0.005 | 0.006 | 0.017  | 0.027  | 0.03   | 0.034  | 0.035  | 0.046  | 0.5                | 0.020                   | 0.010               | 0.01                    |
| Roof         | HAE6031A, 380-520MHz | 4.15            | 469.9875      | 48.0        | 47.4            | CW        | E           | 0.95              | BS5       | 0.001                    | 0.001 | 0.001 | 0.005 | 0.007  | 0.015  | 0.027  | 0.031  | 0.03   | 0.037  | 0.5                | 0.015                   | 0.007               | 0.01                    |

Notes:

MPE calculations are defined in section 15.0  
 Blue fonts: Frequencies not regulated by FCC.

**Table F.1 (Continued)**  
**APX6500 UHF R1 - MPE measurement data for Bystander**

| D.U.T. Info. |                          |                 |               |             |                 |           | Probe Info. |                   | Test Pos. | MPE Measurements         |       |       |       |        |        |        |        |        | DUT Max. TX Factor | Avg. over Body (mW/cm2) | Calc. P.D. (mW/cm2) | Max Calc. P.D. (mW/cm2) |        |
|--------------|--------------------------|-----------------|---------------|-------------|-----------------|-----------|-------------|-------------------|-----------|--------------------------|-------|-------|-------|--------|--------|--------|--------|--------|--------------------|-------------------------|---------------------|-------------------------|--------|
| Ant Loc.     | Ant. Model/ Desc.        | Ant. Gain (dBi) | Tx Freq (MHz) | Max Pwr (W) | Initial Pwr (W) | Test Mode | E/H Field   | Probe Cal. Factor |           | Bystander (BS) Positions |       |       |       |        |        |        |        |        |                    |                         |                     |                         |        |
|              |                          |                 |               |             |                 |           |             |                   |           | 20 cm                    | 40 cm | 60 cm | 80 cm | 100 cm | 120 cm | 140 cm | 160 cm | 180 cm |                    |                         |                     |                         | 200 cm |
| Roof         | RAE4014ARB, 445 - 470MHz | 7.15            | 450.0125      | 48.0        | 46.8            | CW        | E           | 1.00              | BS1       | 0.001                    | 0.001 | 0.001 | 0.001 | 0.002  | 0.004  | 0.025  | 0.068  | 0.127  | 0.151              | 0.5                     | 0.042               | 0.021                   | 0.02   |
| Roof         | RAE4014ARB, 445 - 470MHz | 7.15            | 460.0000      | 48.0        | 47.0            | CW        | E           | 0.98              | BS1       | 0.001                    | 0.001 | 0.001 | 0.001 | 0.004  | 0.02   | 0.047  | 0.096  | 0.14   | 0.17               | 0.5                     | 0.047               | 0.024                   | 0.02   |
| Roof         | RAE4014ARB, 445 - 470MHz | 7.15            | 469.9875      | 48.0        | 47.4            | CW        | E           | 0.95              | BS1       | 0.001                    | 0.001 | 0.001 | 0.001 | 0.001  | 0.008  | 0.037  | 0.09   | 0.14   | 0.16               | 0.5                     | 0.041               | 0.021                   | 0.02   |
| Roof         | RAE4014ARB, 445 - 470MHz | 7.15            | 450.0125      | 48.0        | 46.8            | CW        | E           | 1.00              | BS2       | 0.001                    | 0.001 | 0.001 | 0.001 | 0.002  | 0.006  | 0.021  | 0.051  | 0.106  | 0.137              | 0.5                     | 0.033               | 0.016                   | 0.02   |
| Roof         | RAE4014ARB, 445 - 470MHz | 7.15            | 460.0000      | 48.0        | 47.0            | CW        | E           | 0.98              | BS2       | 0.001                    | 0.001 | 0.001 | 0.003 | 0.007  | 0.03   | 0.062  | 0.11   | 0.15   | 0.16               | 0.5                     | 0.051               | 0.026                   | 0.03   |
| Roof         | RAE4014ARB, 445 - 470MHz | 7.15            | 469.9875      | 48.0        | 47.4            | CW        | E           | 0.95              | BS2       | 0.001                    | 0.001 | 0.001 | 0.001 | 0.003  | 0.02   | 0.05   | 0.09   | 0.12   | 0.13               | 0.5                     | 0.039               | 0.020                   | 0.02   |
| Roof         | RAE4014ARB, 445 - 470MHz | 7.15            | 450.0125      | 48.0        | 46.8            | CW        | E           | 1.00              | BS3       | 0.001                    | 0.001 | 0.001 | 0.002 | 0.003  | 0.005  | 0.021  | 0.035  | 0.054  | 0.071              | 0.5                     | 0.019               | 0.010                   | 0.01   |
| Roof         | RAE4014ARB, 445 - 470MHz | 7.15            | 460.0000      | 48.0        | 47.0            | CW        | E           | 0.98              | BS3       | 0.001                    | 0.001 | 0.001 | 0.002 | 0.004  | 0.015  | 0.03   | 0.057  | 0.07   | 0.08               | 0.5                     | 0.026               | 0.013                   | 0.01   |
| Roof         | RAE4014ARB, 445 - 470MHz | 7.15            | 469.9875      | 48.0        | 47.4            | CW        | E           | 0.95              | BS3       | 0.001                    | 0.001 | 0.003 | 0.006 | 0.014  | 0.018  | 0.031  | 0.052  | 0.07   | 0.08               | 0.5                     | 0.026               | 0.013                   | 0.01   |
| Roof         | RAE4014ARB, 445 - 470MHz | 7.15            | 450.0125      | 48.0        | 46.8            | CW        | E           | 1.00              | BS4       | 0.001                    | 0.001 | 0.001 | 0.003 | 0.003  | 0.01   | 0.02   | 0.027  | 0.04   | 0.051              | 0.5                     | 0.016               | 0.008                   | 0.01   |
| Roof         | RAE4014ARB, 445 - 470MHz | 7.15            | 460.0000      | 48.0        | 47.0            | CW        | E           | 0.98              | BS4       | 0.002                    | 0.003 | 0.004 | 0.005 | 0.007  | 0.022  | 0.031  | 0.048  | 0.07   | 0.07               | 0.5                     | 0.025               | 0.013                   | 0.01   |
| Roof         | RAE4014ARB, 445 - 470MHz | 7.15            | 469.9875      | 48.0        | 47.4            | CW        | E           | 0.95              | BS4       | 0.003                    | 0.004 | 0.007 | 0.013 | 0.022  | 0.035  | 0.047  | 0.052  | 0.07   | 0.08               | 0.5                     | 0.032               | 0.016                   | 0.02   |
| Roof         | RAE4014ARB, 445 - 470MHz | 7.15            | 450.0125      | 48.0        | 46.8            | CW        | E           | 1.00              | BS5       | 0.001                    | 0.001 | 0.001 | 0.002 | 0.004  | 0.006  | 0.024  | 0.033  | 0.052  | 0.067              | 0.5                     | 0.019               | 0.010                   | 0.01   |
| Roof         | RAE4014ARB, 445 - 470MHz | 7.15            | 460.0000      | 48.0        | 47.0            | CW        | E           | 0.98              | BS5       | 0.001                    | 0.001 | 0.002 | 0.003 | 0.004  | 0.007  | 0.025  | 0.032  | 0.04   | 0.055              | 0.5                     | 0.017               | 0.009                   | 0.01   |
| Roof         | RAE4014ARB, 445 - 470MHz | 7.15            | 469.9875      | 48.0        | 47.4            | CW        | E           | 0.95              | BS5       | 0.002                    | 0.002 | 0.002 | 0.002 | 0.005  | 0.03   | 0.04   | 0.043  | 0.06   | 0.07               | 0.5                     | 0.023               | 0.012                   | 0.01   |

Notes:

MPE calculations are defined in section 15.0

Table F.2

## APX6500 UHF R1 - MPE measurement data for Passenger

| D.U.T. Info. |                      |                 |               |             |                 |           | Probe Info. |                   | Test Pos. | MPE Measurements                  |                   |                         | DUT Max. TX Factor | Avg. over Body (mW/ cm2) | Calc. P.D. (mW/ cm2) | Max Calc. P.D. (mW/ cm2) |
|--------------|----------------------|-----------------|---------------|-------------|-----------------|-----------|-------------|-------------------|-----------|-----------------------------------|-------------------|-------------------------|--------------------|--------------------------|----------------------|--------------------------|
| Ant Loc.     | Ant. Model/ Desc.    | Ant. Gain (dBi) | Tx Freq (MHz) | Max Pwr (W) | Initial Pwr (W) | Test Mode | E/H Field   | Probe Cal. Factor |           | Passenger/Operator (MC) Positions |                   |                         |                    |                          |                      |                          |
|              |                      |                 |               |             |                 |           |             |                   |           | Head/ Top 1/3                     | Chest/ Middle 1/3 | Lower Trunk/ Bottom 1/3 |                    |                          |                      |                          |
| Roof         | HAE4003A, 450-470MHz | 2.15            | 450.0125      | 48.0        | 46.8            | CW        | E           | 1.00              | PB        | 0.073                             | 0.047             | 0.153                   | 0.5                | 0.091                    | 0.046                | 0.05                     |
| Roof         | HAE4003A, 450-470MHz | 2.15            | 460           | 48.0        | 47              | CW        | E           | 0.98              | PB        | 0.045                             | 0.053             | 0.09                    | 0.5                | 0.061                    | 0.031                | 0.03                     |
| Roof         | HAE4003A, 450-470MHz | 2.15            | 469.9875      | 48.0        | 47.4            | CW        | E           | 0.95              | PB        | 0.066                             | 0.047             | 0.081                   | 0.5                | 0.061                    | 0.031                | 0.03                     |
| Roof         | HAE4011A, 450-470MHz | 5.65            | 450.0125      | 48.0        | 46.8            | CW        | E           | 1.00              | PB        | 0.023                             | 0.014             | 0.022                   | 0.5                | 0.020                    | 0.010                | 0.01                     |
| Roof         | HAE4011A, 450-470MHz | 5.65            | 460           | 48.0        | 47              | CW        | E           | 0.98              | PB        | 0.013                             | 0.019             | 0.012                   | 0.5                | 0.014                    | 0.007                | 0.01                     |
| Roof         | HAE4011A, 450-470MHz | 5.65            | 469.9875      | 48.0        | 47.4            | CW        | E           | 0.95              | PB        | 0.016                             | 0.016             | 0.014                   | 0.5                | 0.015                    | 0.007                | 0.01                     |
| Roof         | HAE6010A,380-433MHz  | 5.65            | 380.0125      | 48.0        | 47.6            | CW        | E           | 1.09              | PB        | 0.064                             | 0.07              | 0.145                   | 0.5                | 0.101                    | 0.051                | 0.05                     |
| Roof         | HAE6010A,380-433MHz  | 5.65            | 393.0125      | 48.0        | 47.6            | CW        | E           | 1.11              | PB        | 0.078                             | 0.08              | 0.094                   | 0.5                | 0.093                    | 0.047                | 0.05                     |
| Roof         | HAE6010A,380-433MHz  | 5.65            | 406.5000      | 48.0        | 47.1            | CW        | E           | 1.11              | PB        | 0.06                              | 0.065             | 0.095                   | 0.5                | 0.081                    | 0.041                | 0.04                     |
| Roof         | HAE6010A,380-433MHz  | 5.65            | 419.5000      | 48.0        | 47.4            | CW        | E           | 1.07              | PB        | 0.05                              | 0.068             | 0.08                    | 0.5                | 0.071                    | 0.035                | 0.04                     |
| Roof         | HAE6010A,380-433MHz  | 5.65            | 432.9875      | 48.0        | 46.6            | CW        | E           | 1.04              | PB        | 0.047                             | 0.058             | 0.06                    | 0.5                | 0.057                    | 0.029                | 0.03                     |
| Roof         | HAE6011A,380-433MHz  | 7.15            | 380.0125      | 48.0        | 47.6            | CW        | E           | 1.09              | PB        | 0.01                              | 0.006             | 0.029                   | 0.5                | 0.016                    | 0.008                | 0.01                     |
| Roof         | HAE6011A,380-433MHz  | 7.15            | 393.0125      | 48.0        | 47.6            | CW        | E           | 1.11              | PB        | 0.004                             | 0.006             | 0.014                   | 0.5                | 0.009                    | 0.004                | 0.00                     |
| Roof         | HAE6011A,380-433MHz  | 7.15            | 406.5000      | 48.0        | 47.1            | CW        | E           | 1.11              | PB        | 0.01                              | 0.021             | 0.021                   | 0.5                | 0.019                    | 0.010                | 0.01                     |
| Roof         | HAE6011A,380-433MHz  | 7.15            | 419.5000      | 48.0        | 47.4            | CW        | E           | 1.07              | PB        | 0.016                             | 0.015             | 0.01                    | 0.5                | 0.015                    | 0.007                | 0.01                     |

Notes:

MPE calculations are defined in section 15.0

Blue fonts: Frequencies not regulated by FCC.

Table F.2 (Continued)

## APX6500 UHF R1 - MPE measurement data for Passenger

| D.U.T. Info. |                      |                 |               |             |                 |           | Probe Info. |                   | Test Pos. | MPE Measurements                  |                   |                         | DUT Max. TX Factor | Avg. over Body (mW/ cm2) | Calc. P.D. (mW/ cm2) | Max Calc. P.D. (mW/ cm2) |
|--------------|----------------------|-----------------|---------------|-------------|-----------------|-----------|-------------|-------------------|-----------|-----------------------------------|-------------------|-------------------------|--------------------|--------------------------|----------------------|--------------------------|
| Ant Loc.     | Ant. Model/ Desc.    | Ant. Gain (dBi) | Tx Freq (MHz) | Max Pwr (W) | Initial Pwr (W) | Test Mode | E/H Field   | Probe Cal. Factor |           | Passenger/Operator (MC) Positions |                   |                         |                    |                          |                      |                          |
|              |                      |                 |               |             |                 |           |             |                   |           | Head/ Top 1/3                     | Chest/ Middle 1/3 | Lower Trunk/ Bottom 1/3 |                    |                          |                      |                          |
| Roof         | HAE6011A,380-433MHz  | 7.15            | 432.9875      | 48.0        | 46.6            | CW        | E           | 1.04              | PB        | 0.004                             | 0.007             | 0.006                   | 0.5                | 0.006                    | 0.003                | 0.00                     |
| Roof         | HAE6012A, 380-433MHz | 2.15            | 380.0125      | 48.0        | 47.6            | CW        | E           | 1.09              | PB        | 0.16                              | 0.083             | 0.204                   | 0.5                | 0.162                    | 0.081                | 0.08                     |
| Roof         | HAE6012A, 380-433MHz | 2.15            | 393.0125      | 48.0        | 47.6            | CW        | E           | 1.11              | PB        | 0.053                             | 0.06              | 0.077                   | 0.5                | 0.070                    | 0.035                | 0.04                     |
| Roof         | HAE6012A, 380-433MHz | 2.15            | 406.5000      | 48.0        | 47.1            | CW        | E           | 1.11              | PB        | 0.05                              | 0.093             | 0.077                   | 0.5                | 0.081                    | 0.041                | 0.04                     |
| Roof         | HAE6012A, 380-433MHz | 2.15            | 419.5000      | 48.0        | 47.4            | CW        | E           | 1.07              | PB        | 0.048                             | 0.05              | 0.064                   | 0.5                | 0.058                    | 0.029                | 0.03                     |
| Roof         | HAE6012A, 380-433MHz | 2.15            | 432.9875      | 48.0        | 46.6            | CW        | E           | 1.04              | PB        | 0.04                              | 0.055             | 0.04                    | 0.5                | 0.047                    | 0.023                | 0.02                     |
| Roof         | HAE6013A, 380-470MHz | 4.15            | 380.0125      | 48.0        | 47.6            | CW        | E           | 1.09              | PB        | 0.13                              | 0.09              | 0.204                   | 0.5                | 0.154                    | 0.077                | 0.08                     |
| Roof         | HAE6013A, 380-470MHz | 4.15            | 393.0125      | 48.0        | 47.6            | CW        | E           | 1.11              | PB        | 0.05                              | 0.036             | 0.065                   | 0.5                | 0.056                    | 0.028                | 0.03                     |
| Roof         | HAE6013A, 380-470MHz | 4.15            | 406.5000      | 48.0        | 47.1            | CW        | E           | 1.14              | PB        | 0.057                             | 0.088             | 0.091                   | 0.5                | 0.090                    | 0.045                | 0.05                     |
| Roof         | HAE6013A, 380-470MHz | 4.15            | 422.0125      | 48.0        | 47.3            | CW        | E           | 1.14              | PB        | 0.032                             | 0.045             | 0.052                   | 0.5                | 0.049                    | 0.025                | 0.02                     |
| Roof         | HAE6013A, 380-470MHz | 4.15            | 438.0125      | 48.0        | 46.7            | CW        | E           | 1.14              | PB        | 0.05                              | 0.053             | 0.08                    | 0.5                | 0.070                    | 0.035                | 0.04                     |
| Roof         | HAE6013A, 380-470MHz | 4.15            | 450.0125      | 48.0        | 46.8            | CW        | E           | 1.14              | PB        | 0.066                             | 0.075             | 0.123                   | 0.5                | 0.100                    | 0.050                | 0.05                     |
| Roof         | HAE6013A, 380-470MHz | 4.15            | 469.9875      | 48.0        | 47.4            | CW        | E           | 1.14              | PB        | 0.054                             | 0.05              | 0.081                   | 0.5                | 0.070                    | 0.035                | 0.04                     |
| Roof         | HAE6015A, 450-520MHz | 4.15            | 450.0125      | 48.0        | 46.8            | CW        | E           | 1.00              | PB        | 0.07                              | 0.077             | 0.145                   | 0.5                | 0.097                    | 0.049                | 0.05                     |
| Roof         | HAE6015A, 450-520MHz | 4.15            | 460.0000      | 48.0        | 47              | CW        | E           | 0.98              | PB        | 0.05                              | 0.083             | 0.111                   | 0.5                | 0.080                    | 0.040                | 0.04                     |

Notes:

MPE calculations are defined in section 15.0

Blue fonts: Frequencies not regulated by FCC.



Table F.2 (Continued)

## APX6500 UHF R1 - MPE measurement data for Passenger

| D.U.T. Info. |                             |                    |                  |                   |                       |              | Probe Info.  |                         | Test Pos. | MPE Measurements<br>Passenger/Operator (MC)<br>Positions |                         |                                  | DUT<br>Max.<br>TX<br>Factor | Avg. over<br>Body (mW/<br>cm <sup>2</sup> ) | Calc. P.D.<br>(mW/ cm <sup>2</sup> ) | Max Calc.<br>P.D. (mW/<br>cm <sup>2</sup> ) |
|--------------|-----------------------------|--------------------|------------------|-------------------|-----------------------|--------------|--------------|-------------------------|-----------|----------------------------------------------------------|-------------------------|----------------------------------|-----------------------------|---------------------------------------------|--------------------------------------|---------------------------------------------|
| Ant<br>Loc.  | Ant. Model/<br>Desc.        | Ant. Gain<br>(dBi) | Tx Freq<br>(MHz) | Max<br>Pwr<br>(W) | Initial<br>Pwr<br>(W) | Test<br>Mode | E/H<br>Field | Probe<br>Cal.<br>Factor |           |                                                          |                         |                                  |                             |                                             |                                      |                                             |
|              |                             |                    |                  |                   |                       |              |              |                         |           | Head/<br>Top 1/3                                         | Chest/<br>Middle<br>1/3 | Lower<br>Trunk/<br>Bottom<br>1/3 |                             |                                             |                                      |                                             |
| Roof         | HAE6015A, 450-<br>520MHz    | 4.15               | 469.9875         | 48.0              | 47.4                  | CW           | E            | 0.95                    | PB        | 0.066                                                    | 0.05                    | 0.08                             | 0.5                         | 0.062                                       | 0.031                                | 0.03                                        |
| Roof         | HAE6016A, 450-<br>- 512MHz  | 2.15               | 450.0125         | 48.0              | 46.8                  | CW           | E            | 1.00                    | PB        | 0.053                                                    | 0.043                   | 0.105                            | 0.5                         | 0.067                                       | 0.034                                | 0.03                                        |
| Roof         | HAE6016A, 450-<br>- 512MHz  | 2.15               | 460.0000         | 48.0              | 47                    | CW           | E            | 0.98                    | PB        | 0.042                                                    | 0.055                   | 0.098                            | 0.5                         | 0.064                                       | 0.032                                | 0.03                                        |
| Roof         | HAE6016A, 450-<br>- 512MHz  | 2.15               | 469.9875         | 48.0              | 47.4                  | CW           | E            | 0.95                    | PB        | 0.057                                                    | 0.04                    | 0.06                             | 0.5                         | 0.050                                       | 0.025                                | 0.03                                        |
| Roof         | HAE6031A, 380-<br>520MHz    | 4.15               | 380.0125         | 48.0              | 47.6                  | CW           | E            | 1.09                    | PB        | 0.068                                                    | 0.065                   | 0.162                            | 0.5                         | 0.107                                       | 0.054                                | 0.05                                        |
| Roof         | HAE6031A, 380-<br>520MHz    | 4.15               | 393.0125         | 48.0              | 47.6                  | CW           | E            | 1.11                    | PB        | 0.056                                                    | 0.042                   | 0.068                            | 0.5                         | 0.061                                       | 0.031                                | 0.03                                        |
| Roof         | HAE6031A, 380-<br>520MHz    | 4.15               | 406.5000         | 48.0              | 47.1                  | CW           | E            | 1.11                    | PB        | 0.030                                                    | 0.078                   | 0.092                            | 0.5                         | 0.074                                       | 0.037                                | 0.04                                        |
| Roof         | HAE6031A, 380-<br>520MHz    | 4.15               | 422.0125         | 48.0              | 47.3                  | CW           | E            | 1.07                    | PB        | 0.040                                                    | 0.056                   | 0.072                            | 0.5                         | 0.060                                       | 0.030                                | 0.03                                        |
| Roof         | HAE6031A, 380-<br>520MHz    | 4.15               | 438.0125         | 48.0              | 46.7                  | CW           | E            | 1.03                    | PB        | 0.050                                                    | 0.055                   | 0.070                            | 0.5                         | 0.060                                       | 0.030                                | 0.03                                        |
| Roof         | HAE6031A, 380-<br>520MHz    | 4.15               | 450.0125         | 48.0              | 46.8                  | CW           | E            | 1.00                    | PB        | 0.065                                                    | 0.040                   | 0.143                            | 0.5                         | 0.083                                       | 0.041                                | 0.04                                        |
| Roof         | HAE6031A, 380-<br>520MHz    | 4.15               | 469.9875         | 48.0              | 47.4                  | CW           | E            | 0.95                    | PB        | 0.074                                                    | 0.050                   | 0.066                            | 0.5                         | 0.060                                       | 0.030                                | 0.03                                        |
| Roof         | RAE4014ARB,<br>445 - 470MHz | 7.15               | 450.0125         | 48.0              | 46.8                  | CW           | E            | 1.00                    | PB        | 0.004                                                    | 0.014                   | 0.019                            | 0.5                         | 0.012                                       | 0.006                                | 0.01                                        |
| Roof         | RAE4014ARB,<br>445 - 470MHz | 7.15               | 460              | 48.0              | 47                    | CW           | E            | 0.98                    | PB        | 0.006                                                    | 0.012                   | 0.016                            | 0.5                         | 0.011                                       | 0.006                                | 0.01                                        |
| Roof         | RAE4014ARB,<br>445 - 470MHz | 7.15               | 469.9875         | 48.0              | 47.4                  | CW           | E            | 0.95                    | PB        | 0.013                                                    | 0.014                   | 0.016                            | 0.5                         | 0.014                                       | 0.007                                | 0.01                                        |

Notes:

MPE calculations are defined in section 15.0

Blue fonts: Frequencies not regulated by FCC.

**Table F.2 (Continued)****APX6500 UHF R1 - MPE measurement data for Passenger**

| D.U.T. Info. |                      |                 |               |             |                 |           | Probe Info. |                   | Test Pos. | MPE Measurements                  |                   |                         | DUT Max. TX Factor | Avg. over Body (mW/ cm2) | Calc. P.D. (mW/ cm2) | Max Calc. P.D. (mW/ cm2) |
|--------------|----------------------|-----------------|---------------|-------------|-----------------|-----------|-------------|-------------------|-----------|-----------------------------------|-------------------|-------------------------|--------------------|--------------------------|----------------------|--------------------------|
| Ant Loc.     | Ant. Model/ Desc.    | Ant. Gain (dBi) | Tx Freq (MHz) | Max Pwr (W) | Initial Pwr (W) | Test Mode | E/H Field   | Probe Cal. Factor |           | Passenger/Operator (MC) Positions |                   |                         |                    |                          |                      |                          |
|              |                      |                 |               |             |                 |           |             |                   |           | Head/ Top 1/3                     | Chest/ Middle 1/3 | Lower Trunk/ Bottom 1/3 |                    |                          |                      |                          |
| Roof         | HAE4003A, 450-470MHz | 2.15            | 450.0125      | 48.0        | 46.8            | CW        | E           | 1.00              | PF        | 0.032                             | 0.041             | 0.036                   | 0.5                | 0.036                    | 0.018                | 0.02                     |
| Roof         | HAE4003A, 450-470MHz | 2.15            | 460           | 48.0        | 47              | CW        | E           | 0.98              | PF        | 0.026                             | 0.038             | 0.048                   | 0.5                | 0.037                    | 0.018                | 0.02                     |
| Roof         | HAE4003A, 450-470MHz | 2.15            | 469.9875      | 48.0        | 47.4            | CW        | E           | 0.95              | PF        | 0.042                             | 0.044             | 0.077                   | 0.5                | 0.052                    | 0.026                | 0.03                     |
| Roof         | HAE4011A, 450-470MHz | 5.65            | 450.0125      | 48.0        | 46.8            | CW        | E           | 1.00              | PF        | 0.006                             | 0.016             | 0.014                   | 0.5                | 0.012                    | 0.006                | 0.01                     |
| Roof         | HAE4011A, 450-470MHz | 5.65            | 460           | 48.0        | 47              | CW        | E           | 0.98              | PF        | 0.004                             | 0.011             | 0.017                   | 0.5                | 0.010                    | 0.005                | 0.01                     |
| Roof         | HAE4011A, 450-470MHz | 5.65            | 469.9875      | 48.0        | 47.4            | CW        | E           | 0.95              | PF        | 0.005                             | 0.008             | 0.021                   | 0.5                | 0.011                    | 0.005                | 0.01                     |
| Roof         | HAE6010A,380-433MHz  | 5.65            | 380.0125      | 48.0        | 47.6            | CW        | E           | 1.09              | PF        | 0.036                             | 0.058             | 0.065                   | 0.5                | 0.058                    | 0.029                | 0.03                     |
| Roof         | HAE6010A,380-433MHz  | 5.65            | 393.0125      | 48.0        | 47.6            | CW        | E           | 1.11              | PF        | 0.05                              | 0.072             | 0.06                    | 0.5                | 0.067                    | 0.034                | 0.03                     |
| Roof         | HAE6010A,380-433MHz  | 5.65            | 406.5000      | 48.0        | 47.1            | CW        | E           | 1.11              | PF        | 0.116                             | 0.114             | 0.075                   | 0.5                | 0.113                    | 0.056                | 0.06                     |
| Roof         | HAE6010A,380-433MHz  | 5.65            | 419.5000      | 48.0        | 47.4            | CW        | E           | 1.07              | PF        | 0.103                             | 0.074             | 0.03                    | 0.5                | 0.074                    | 0.037                | 0.04                     |
| Roof         | HAE6010A,380-433MHz  | 5.65            | 432.9875      | 48.0        | 46.6            | CW        | E           | 1.04              | PF        | 0.035                             | 0.03              | 0.041                   | 0.5                | 0.037                    | 0.018                | 0.02                     |
| Roof         | HAE6011A,380-433MHz  | 7.15            | 380.0125      | 48.0        | 47.6            | CW        | E           | 1.09              | PF        | 0.007                             | 0.005             | 0.004                   | 0.5                | 0.006                    | 0.003                | 0.00                     |
| Roof         | HAE6011A,380-433MHz  | 7.15            | 393.0125      | 48.0        | 47.6            | CW        | E           | 1.11              | PF        | 0.013                             | 0.011             | 0.008                   | 0.5                | 0.012                    | 0.006                | 0.01                     |
| Roof         | HAE6011A,380-433MHz  | 7.15            | 406.5000      | 48.0        | 47.1            | CW        | E           | 1.11              | PF        | 0.023                             | 0.018             | 0.01                    | 0.5                | 0.019                    | 0.009                | 0.01                     |
| Roof         | HAE6011A,380-433MHz  | 7.15            | 419.5000      | 48.0        | 47.4            | CW        | E           | 1.07              | PF        | 0.01                              | 0.006             | 0.003                   | 0.5                | 0.007                    | 0.003                | 0.00                     |

Notes:

MPE calculations are defined in section 15.0

Blue fonts: Frequencies not regulated by FCC.

Table F.2 (Continued)

## APX6500 UHF R1 - MPE measurement data for Passenger

| D.U.T. Info. |                      |                 |               |             |                 |           | Probe Info. |                   | Test Pos. | MPE Measurements                  |                   |                         | DUT Max. TX Factor | Avg. over Body (mW/ cm2) | Calc. P.D. (mW/ cm2) | Max Calc. P.D. (mW/ cm2) |
|--------------|----------------------|-----------------|---------------|-------------|-----------------|-----------|-------------|-------------------|-----------|-----------------------------------|-------------------|-------------------------|--------------------|--------------------------|----------------------|--------------------------|
| Ant Loc.     | Ant. Model/ Desc.    | Ant. Gain (dBi) | Tx Freq (MHz) | Max Pwr (W) | Initial Pwr (W) | Test Mode | E/H Field   | Probe Cal. Factor |           | Passenger/Operator (MC) Positions |                   |                         |                    |                          |                      |                          |
|              |                      |                 |               |             |                 |           |             |                   |           | Head/ Top 1/3                     | Chest/ Middle 1/3 | Lower Trunk/ Bottom 1/3 |                    |                          |                      |                          |
| Roof         | HAE6011A,380-433MHz  | 7.15            | 432.9875      | 48.0        | 46.6            | CW        | E           | 1.04              | PF        | 0.004                             | 0.004             | 0.002                   | 0.5                | 0.003                    | 0.002                | 0.00                     |
| Roof         | HAE6012A, 380-433MHz | 2.15            | 380.0125      | 48.0        | 47.6            | CW        | E           | 1.09              | PF        | 0.04                              | 0.038             | 0.06                    | 0.5                | 0.050                    | 0.025                | 0.03                     |
| Roof         | HAE6012A, 380-433MHz | 2.15            | 393.0125      | 48.0        | 47.6            | CW        | E           | 1.11              | PF        | 0.065                             | 0.062             | 0.05                    | 0.5                | 0.065                    | 0.033                | 0.03                     |
| Roof         | HAE6012A, 380-433MHz | 2.15            | 406.5000      | 48.0        | 47.1            | CW        | E           | 1.11              | PF        | 0.108                             | 0.08              | 0.054                   | 0.5                | 0.090                    | 0.045                | 0.05                     |
| Roof         | HAE6012A, 380-433MHz | 2.15            | 419.5000      | 48.0        | 47.4            | CW        | E           | 1.07              | PF        | 0.078                             | 0.052             | 0.025                   | 0.5                | 0.055                    | 0.028                | 0.03                     |
| Roof         | HAE6012A, 380-433MHz | 2.15            | 432.9875      | 48.0        | 46.6            | CW        | E           | 1.04              | PF        | 0.025                             | 0.028             | 0.037                   | 0.5                | 0.031                    | 0.016                | 0.02                     |
| Roof         | HAE6013A, 380-470MHz | 4.15            | 380.0125      | 48.0        | 47.6            | CW        | E           | 1.09              | PF        | 0.036                             | 0.042             | 0.053                   | 0.5                | 0.048                    | 0.024                | 0.02                     |
| Roof         | HAE6013A, 380-470MHz | 4.15            | 393.0125      | 48.0        | 47.6            | CW        | E           | 1.11              | PF        | 0.053                             | 0.044             | 0.042                   | 0.5                | 0.051                    | 0.026                | 0.03                     |
| Roof         | HAE6013A, 380-470MHz | 4.15            | 406.5000      | 48.0        | 47.1            | CW        | E           | 1.11              | PF        | 0.119                             | 0.075             | 0.055                   | 0.5                | 0.092                    | 0.046                | 0.05                     |
| Roof         | HAE6013A, 380-470MHz | 4.15            | 422.0125      | 48.0        | 47.3            | CW        | E           | 1.07              | PF        | 0.074                             | 0.054             | 0.02                    | 0.5                | 0.053                    | 0.026                | 0.03                     |
| Roof         | HAE6013A, 380-470MHz | 4.15            | 438.0125      | 48.0        | 46.7            | CW        | E           | 1.03              | PF        | 0.036                             | 0.02              | 0.036                   | 0.5                | 0.032                    | 0.016                | 0.02                     |
| Roof         | HAE6013A, 380-470MHz | 4.15            | 450.0125      | 48.0        | 46.8            | CW        | E           | 1.00              | PF        | 0.028                             | 0.07              | 0.03                    | 0.5                | 0.043                    | 0.021                | 0.02                     |
| Roof         | HAE6013A, 380-470MHz | 4.15            | 469.9875      | 48.0        | 47.4            | CW        | E           | 0.95              | PF        | 0.037                             | 0.044             | 0.076                   | 0.5                | 0.050                    | 0.025                | 0.03                     |
| Roof         | HAE6015A, 450-520MHz | 4.15            | 450.0125      | 48.0        | 46.8            | CW        | E           | 1.00              | PF        | 0.026                             | 0.05              | 0.032                   | 0.5                | 0.036                    | 0.018                | 0.02                     |
| Roof         | HAE6015A, 450-520MHz | 4.15            | 460.0000      | 48.0        | 47              | CW        | E           | 0.98              | PF        | 0.04                              | 0.046             | 0.052                   | 0.5                | 0.045                    | 0.023                | 0.02                     |

Notes:

MPE calculations are defined in section 15.0

Blue fonts: Frequencies not regulated by FCC.

**Table F.2 (Continued)****APX6500 UHF R1 - MPE measurement data for Passenger**

| D.U.T. Info. |                          |                 |               |             |                 |           | Probe Info. |                   |    | MPE Measurements |                                   |                   | DUT Max. TX Factor | Avg. over Body (mW/ cm2) | Calc. P.D. (mW/ cm2) | Max Calc. P.D. (mW/ cm2) |                         |
|--------------|--------------------------|-----------------|---------------|-------------|-----------------|-----------|-------------|-------------------|----|------------------|-----------------------------------|-------------------|--------------------|--------------------------|----------------------|--------------------------|-------------------------|
| Ant Loc.     | Ant. Model/ Desc.        | Ant. Gain (dBi) | Tx Freq (MHz) | Max Pwr (W) | Initial Pwr (W) | Test Mode | E/H Field   | Probe Cal. Factor |    | Test Pos.        | Passenger/Operator (MC) Positions |                   |                    |                          |                      |                          |                         |
|              |                          |                 |               |             |                 |           |             |                   |    |                  | Head/ Top 1/3                     | Chest/ Middle 1/3 |                    |                          |                      |                          | Lower Trunk/ Bottom 1/3 |
| Roof         | HAE6015A, 450-520MHz     | 4.15            | 469.9875      | 48.0        | 47.4            | CW        | E           | 0.95              | PF | 0.054            | 0.042                             | 0.063             | 0.5                | 0.050                    | 0.025                | 0.03                     |                         |
| Roof         | HAE6016A, 450 - 512MHz   | 2.15            | 450.0125      | 48.0        | 46.8            | CW        | E           | 1.00              | PF | 0.025            | 0.041                             | 0.031             | 0.5                | 0.032                    | 0.016                | 0.02                     |                         |
| Roof         | HAE6016A, 450 - 512MHz   | 2.15            | 460.0000      | 48.0        | 47              | CW        | E           | 0.98              | PF | 0.035            | 0.042                             | 0.036             | 0.5                | 0.037                    | 0.018                | 0.02                     |                         |
| Roof         | HAE6016A, 450 - 512MHz   | 2.15            | 469.9875      | 48.0        | 47.4            | CW        | E           | 0.95              | PF | 0.034            | 0.037                             | 0.052             | 0.5                | 0.039                    | 0.019                | 0.02                     |                         |
| Roof         | HAE6031A, 380-520MHz     | 4.15            | 380.0125      | 48.0        | 47.6            | CW        | E           | 1.09              | PF | 0.044            | 0.047                             | 0.066             | 0.5                | 0.057                    | 0.029                | 0.03                     |                         |
| Roof         | HAE6031A, 380-520MHz     | 4.15            | 393.0125      | 48.0        | 47.6            | CW        | E           | 1.11              | PF | 0.056            | 0.071                             | 0.058             | 0.5                | 0.068                    | 0.034                | 0.03                     |                         |
| Roof         | HAE6031A, 380-520MHz     | 4.15            | 406.5000      | 48.0        | 47.1            | CW        | E           | 1.11              | PF | 0.100            | 0.090                             | 0.058             | 0.5                | 0.092                    | 0.046                | 0.05                     |                         |
| Roof         | HAE6031A, 380-520MHz     | 4.15            | 422.0125      | 48.0        | 47.3            | CW        | E           | 1.07              | PF | 0.080            | 0.058                             | 0.030             | 0.5                | 0.060                    | 0.030                | 0.03                     |                         |
| Roof         | HAE6031A, 380-520MHz     | 4.15            | 438.0125      | 48.0        | 46.7            | CW        | E           | 1.03              | PF | 0.032            | 0.023                             | 0.034             | 0.5                | 0.031                    | 0.015                | 0.02                     |                         |
| Roof         | HAE6031A, 380-520MHz     | 4.15            | 450.0125      | 48.0        | 46.8            | CW        | E           | 1.00              | PF | 0.044            | 0.072                             | 0.038             | 0.5                | 0.051                    | 0.026                | 0.03                     |                         |
| Roof         | HAE6031A, 380-520MHz     | 4.15            | 469.9875      | 48.0        | 47.4            | CW        | E           | 0.95              | PF | 0.048            | 0.057                             | 0.077             | 0.5                | 0.058                    | 0.029                | 0.03                     |                         |
| Roof         | RAE4014ARB, 445 - 470MHz | 7.15            | 450.0125      | 48.0        | 46.8            | CW        | E           | 1.00              | PF | 0.002            | 0.005                             | 0.003             | 0.5                | 0.003                    | 0.002                | 0.00                     |                         |
| Roof         | RAE4014ARB, 445 - 470MHz | 7.15            | 460           | 48.0        | 47              | CW        | E           | 0.98              | PF | 0.006            | 0.007                             | 0.005             | 0.5                | 0.006                    | 0.003                | 0.00                     |                         |
| Roof         | RAE4014ARB, 445 - 470MHz | 7.15            | 469.9875      | 48.0        | 47.4            | CW        | E           | 0.95              | PF | 0.01             | 0.011                             | 0.019             | 0.5                | 0.013                    | 0.006                | 0.01                     |                         |

Notes:

MPE calculations are defined in section 15.0

Blue fonts: Frequencies not regulated by FCC.

## **Appendix G – MPE Test Results Summary for Companion Device (DVR UHF)**

Table G.1

## DVR UHF - MPE measurement data for Bystander

| D.U.T. Info. |                                 |                 |               |             |                 |           | Probe Info. |                   | Test Pos. | MPE Measurements         |       |       |       |        |        |        |        |        |        | DUT Max. TX Factor | Avg. over Body (mW/ cm2) | Calc. P.D. (mW/ cm2) | Max Calc. P.D. (mW/ cm2) |
|--------------|---------------------------------|-----------------|---------------|-------------|-----------------|-----------|-------------|-------------------|-----------|--------------------------|-------|-------|-------|--------|--------|--------|--------|--------|--------|--------------------|--------------------------|----------------------|--------------------------|
| Ant Loc.     | Ant. Model/ Desc.               | Ant. Gain (dBi) | Tx Freq (MHz) | Max Pwr (W) | Initial Pwr (W) | Test Mode | E/H Field   | Probe Cal. Factor |           | Bystander (BS) Positions |       |       |       |        |        |        |        |        |        |                    |                          |                      |                          |
|              |                                 |                 |               |             |                 |           |             |                   |           | 20 cm                    | 40 cm | 60 cm | 80 cm | 100 cm | 120 cm | 140 cm | 160 cm | 180 cm | 200 cm |                    |                          |                      |                          |
| Trunk        | HAE6012A, 1/4 Wave (380-433MHz) | 2.15            | 406.5000      | 10.00       | 9.68            | CW        | E           | 0.99              | BS1       | 0.001                    | 0.001 | 0.002 | 0.003 | 0.007  | 0.007  | 0.007  | 0.008  | 0.007  | 0.008  | 1.0                | 0.005                    | 0.005                | 0.005                    |
| Trunk        | HAE6012A, 1/4 Wave (380-433MHz) | 2.15            | 417.5000      | 10.00       | 9.90            | CW        | E           | 0.99              | BS1       | 0.002                    | 0.003 | 0.002 | 0.003 | 0.005  | 0.006  | 0.007  | 0.009  | 0.011  | 0.011  | 1.0                | 0.006                    | 0.006                | 0.006                    |
| Trunk        | HAE6012A, 1/4 Wave (380-433MHz) | 2.15            | 429.9875      | 10.00       | 9.60            | CW        | E           | 1.00              | BS1       | 0.002                    | 0.004 | 0.003 | 0.003 | 0.005  | 0.008  | 0.010  | 0.011  | 0.011  | 0.013  | 1.0                | 0.007                    | 0.007                | 0.007                    |
|              |                                 |                 |               |             |                 |           |             |                   |           |                          |       |       |       |        |        |        |        |        |        |                    |                          |                      |                          |
| Trunk        | HAE6012A, 1/4 Wave (380-433MHz) | 2.15            | 406.5000      | 10.00       | 9.68            | CW        | E           | 0.99              | BS2       | 0.002                    | 0.003 | 0.009 | 0.012 | 0.012  | 0.013  | 0.019  | 0.029  | 0.027  | 0.027  | 1.0                | 0.015                    | 0.02                 | 0.016                    |
| Trunk        | HAE6012A, 1/4 Wave (380-433MHz) | 2.15            | 417.5000      | 10.00       | 9.90            | CW        | E           | 0.99              | BS2       | 0.001                    | 0.002 | 0.006 | 0.008 | 0.015  | 0.022  | 0.024  | 0.026  | 0.022  | 0.023  | 1.0                | 0.015                    | 0.01                 | 0.015                    |
| Trunk        | HAE6012A, 1/4 Wave (380-433MHz) | 2.15            | 429.9875      | 10.00       | 9.60            | CW        | E           | 1.00              | BS2       | 0.002                    | 0.005 | 0.008 | 0.009 | 0.010  | 0.017  | 0.022  | 0.023  | 0.025  | 0.022  | 1.0                | 0.014                    | 0.01                 | 0.015                    |
|              |                                 |                 |               |             |                 |           |             |                   |           |                          |       |       |       |        |        |        |        |        |        |                    |                          |                      |                          |
| Trunk        | HAE6012A, 1/4 Wave (380-433MHz) | 2.15            | 406.5000      | 10.00       | 9.68            | CW        | E           | 0.99              | BS3       | 0.007                    | 0.007 | 0.009 | 0.014 | 0.015  | 0.022  | 0.030  | 0.033  | 0.035  | 0.037  | 1.0                | 0.021                    | 0.02                 | 0.021                    |
| Trunk        | HAE6012A, 1/4 Wave (380-433MHz) | 2.15            | 417.5000      | 10.00       | 9.90            | CW        | E           | 0.99              | BS3       | 0.005                    | 0.006 | 0.007 | 0.014 | 0.018  | 0.022  | 0.030  | 0.034  | 0.037  | 0.034  | 1.0                | 0.021                    | 0.02                 | 0.021                    |
| Trunk        | HAE6012A, 1/4 Wave (380-433MHz) | 2.15            | 429.9875      | 10.00       | 9.60            | CW        | E           | 1.00              | BS3       | 0.008                    | 0.009 | 0.010 | 0.015 | 0.021  | 0.033  | 0.036  | 0.035  | 0.036  | 0.045  | 1.0                | 0.025                    | 0.02                 | 0.026                    |
|              |                                 |                 |               |             |                 |           |             |                   |           |                          |       |       |       |        |        |        |        |        |        |                    |                          |                      |                          |
| Trunk        | HAE6012A, 1/4 Wave (380-433MHz) | 2.15            | 406.5000      | 10.00       | 9.68            | CW        | E           | 0.99              | BS4       | 0.012                    | 0.015 | 0.019 | 0.030 | 0.041  | 0.047  | 0.060  | 0.059  | 0.065  | 0.054  | 1.0                | 0.040                    | 0.040                | 0.041                    |
| Trunk        | HAE6012A, 1/4 Wave (380-433MHz) | 2.15            | 417.5000      | 10.00       | 9.90            | CW        | E           | 0.99              | BS4       | 0.011                    | 0.014 | 0.020 | 0.031 | 0.041  | 0.058  | 0.063  | 0.059  | 0.046  | 0.048  | 1.0                | 0.039                    | 0.04                 | 0.039                    |
| Trunk        | HAE6012A, 1/4 Wave (380-433MHz) | 2.15            | 429.9875      | 10.00       | 9.60            | CW        | E           | 1.00              | BS4       | 0.012                    | 0.015 | 0.019 | 0.026 | 0.035  | 0.041  | 0.045  | 0.050  | 0.052  | 0.045  | 1.0                | 0.034                    | 0.03                 | 0.035                    |

MPE calculations are defined in section 15.0.

**Table G.1 (Continued)**  
**DVR UHF - MPE measurement data for Bystander**

| D.U.T. Info. |                                 |                 |               |             |                 |           | Probe Info. |                   | Test Pos. | MPE Measurements         |       |       |       |        |        |        |        |        |        | DUT Max. TX Factor | Avg. over Body (mW/ cm2) | Calc. P.D. (mW/ cm2) | Max Calc. P.D. (mW/ cm2) |
|--------------|---------------------------------|-----------------|---------------|-------------|-----------------|-----------|-------------|-------------------|-----------|--------------------------|-------|-------|-------|--------|--------|--------|--------|--------|--------|--------------------|--------------------------|----------------------|--------------------------|
| Ant Loc.     | Ant. Model/ Desc.               | Ant. Gain (dBi) | Tx Freq (MHz) | Max Pwr (W) | Initial Pwr (W) | Test Mode | E/H Field   | Probe Cal. Factor |           | Bystander (BS) Positions |       |       |       |        |        |        |        |        |        |                    |                          |                      |                          |
|              |                                 |                 |               |             |                 |           |             |                   |           | 20 cm                    | 40 cm | 60 cm | 80 cm | 100 cm | 120 cm | 140 cm | 160 cm | 180 cm | 200 cm |                    |                          |                      |                          |
| Trunk        | HAE6012A, 1/4 Wave (380-433MHz) | 2.15            | 406.5000      | 10.00       | 9.68            | CW        | E           | 0.99              | BS5       | 0.022                    | 0.022 | 0.022 | 0.023 | 0.026  | 0.033  | 0.050  | 0.060  | 0.051  | 0.041  | 1.0                | 0.035                    | 0.03                 | 0.036                    |
| Trunk        | HAE6012A, 1/4 Wave (380-433MHz) | 2.15            | 417.5000      | 10.00       | 9.90            | CW        | E           | 0.99              | BS5       | 0.014                    | 0.016 | 0.017 | 0.017 | 0.021  | 0.023  | 0.033  | 0.033  | 0.039  | 0.046  | 1.0                | 0.026                    | 0.03                 | 0.026                    |
| Trunk        | HAE6012A, 1/4 Wave (380-433MHz) | 2.15            | 429.9875      | 10.00       | 9.60            | CW        | E           | 1.00              | BS5       | 0.016                    | 0.014 | 0.014 | 0.014 | 0.017  | 0.025  | 0.027  | 0.032  | 0.029  | 0.036  | 1.0                | 0.022                    | 0.02                 | 0.023                    |
|              |                                 |                 |               |             |                 |           |             |                   |           |                          |       |       |       |        |        |        |        |        |        |                    |                          |                      |                          |
| Trunk        | HAE4003A, 1/4 Wave (450-470MHz) | 2.15            | 450.0000      | 10.00       | 9.96            | CW        | E           | 1.02              | BS1       | 0.002                    | 0.004 | 0.004 | 0.006 | 0.008  | 0.011  | 0.012  | 0.016  | 0.014  | 0.016  | 1.0                | 0.009                    | 0.01                 | 0.010                    |
| Trunk        | HAE4003A, 1/4 Wave (450-470MHz) | 2.15            | 460.0000      | 10.00       | 9.90            | CW        | E           | 1.03              | BS1       | 0.001                    | 0.003 | 0.003 | 0.004 | 0.007  | 0.01   | 0.012  | 0.011  | 0.011  | 0.01   | 1.0                | 0.007                    | 0.01                 | 0.007                    |
| Trunk        | HAE4003A, 1/4 Wave (450-470MHz) | 2.15            | 470.0000      | 10.00       | 10.00           | CW        | E           | 1.04              | BS1       | 0.002                    | 0.002 | 0.002 | 0.002 | 0.004  | 0.007  | 0.008  | 0.01   | 0.006  | 0.009  | 1.0                | 0.005                    | 0.01                 | 0.005                    |
|              |                                 |                 |               |             |                 |           |             |                   |           |                          |       |       |       |        |        |        |        |        |        |                    |                          |                      |                          |
| Trunk        | HAE4003A, 1/4 Wave (450-470MHz) | 2.15            | 450.0000      | 10.00       | 9.96            | CW        | E           | 1.02              | BS2       | 0.002                    | 0.005 | 0.006 | 0.006 | 0.009  | 0.013  | 0.018  | 0.021  | 0.022  | 0.023  | 1.0                | 0.013                    | 0.01                 | 0.013                    |
| Trunk        | HAE4003A, 1/4 Wave (450-470MHz) | 2.15            | 460.0000      | 10.00       | 9.90            | CW        | E           | 1.03              | BS2       | 0.002                    | 0.003 | 0.005 | 0.005 | 0.01   | 0.015  | 0.021  | 0.022  | 0.024  | 0.027  | 1.0                | 0.013                    | 0.01                 | 0.014                    |
| Trunk        | HAE4003A, 1/4 Wave (450-470MHz) | 2.15            | 470.0000      | 10.00       | 10.00           | CW        | E           | 1.04              | BS2       | 0.002                    | 0.003 | 0.003 | 0.004 | 0.009  | 0.015  | 0.019  | 0.018  | 0.02   | 0.027  | 1.0                | 0.012                    | 0.01                 | 0.012                    |
|              |                                 |                 |               |             |                 |           |             |                   |           |                          |       |       |       |        |        |        |        |        |        |                    |                          |                      |                          |
| Trunk        | HAE4003A, 1/4 Wave (450-470MHz) | 2.15            | 450.0000      | 10.00       | 9.96            | CW        | E           | 1.02              | BS3       | 0.009                    | 0.01  | 0.014 | 0.022 | 0.027  | 0.035  | 0.037  | 0.039  | 0.04   | 0.038  | 1.0                | 0.027                    | 0.03                 | 0.028                    |
| Trunk        | HAE4003A, 1/4 Wave (450-470MHz) | 2.15            | 460.0000      | 10.00       | 9.90            | CW        | E           | 1.03              | BS3       | 0.009                    | 0.009 | 0.013 | 0.018 | 0.024  | 0.032  | 0.033  | 0.033  | 0.044  | 0.038  | 1.0                | 0.025                    | 0.03                 | 0.026                    |
| Trunk        | HAE4003A, 1/4 Wave (450-470MHz) | 2.15            | 470.0000      | 10.00       | 10.00           | CW        | E           | 1.04              | BS3       | 0.007                    | 0.007 | 0.012 | 0.017 | 0.022  | 0.035  | 0.045  | 0.047  | 0.04   | 0.028  | 1.0                | 0.026                    | 0.03                 | 0.027                    |

MPE calculations are defined in section 15.0.

**Table G.1 (Continued)**  
**DVR UHF - MPE measurement data for Bystander**

| D.U.T. Info. |                                        |                    |                  |                   |                       |              | Probe Info.  |                         |     | MPE Measurements |                          |       |       |       |           |           |           |           |           | DUT<br>Max. TX<br>Factor | Avg.<br>over<br>Body<br>(mW/<br>cm2) | Calc. P.D.<br>(mW/ cm2) | Max<br>Calc. P.D.<br>(mW/<br>cm2) |           |
|--------------|----------------------------------------|--------------------|------------------|-------------------|-----------------------|--------------|--------------|-------------------------|-----|------------------|--------------------------|-------|-------|-------|-----------|-----------|-----------|-----------|-----------|--------------------------|--------------------------------------|-------------------------|-----------------------------------|-----------|
| Ant<br>Loc.  | Ant. Model/<br>Desc.                   | Ant. Gain<br>(dBi) | Tx Freq<br>(MHz) | Max<br>Pwr<br>(W) | Initial<br>Pwr<br>(W) | Test<br>Mode | E/H<br>Field | Probe<br>Cal.<br>Factor |     | Test<br>Pos.     | Bystander (BS) Positions |       |       |       |           |           |           |           |           |                          |                                      |                         |                                   |           |
|              |                                        |                    |                  |                   |                       |              |              |                         |     |                  | 20 cm                    | 40 cm | 60 cm | 80 cm | 100<br>cm | 120<br>cm | 140<br>cm | 160<br>cm | 180<br>cm |                          |                                      |                         |                                   | 200<br>cm |
| Trunk        | HAE4003A, 1/4<br>Wave (450-<br>470MHz) | 2.15               | 450.0000         | 10.00             | 9.96                  | CW           | E            | 1.02                    | BS4 | 0.014            | 0.017                    | 0.023 | 0.031 | 0.04  | 0.047     | 0.053     | 0.073     | 0.078     | 0.061     | 1.0                      | 0.044                                | 0.045                   | 0.045                             |           |
| Trunk        | HAE4003A, 1/4<br>Wave (450-<br>470MHz) | 2.15               | 460.0000         | 10.00             | 9.90                  | CW           | E            | 1.03                    | BS4 | 0.01             | 0.013                    | 0.015 | 0.021 | 0.025 | 0.035     | 0.05      | 0.062     | 0.062     | 0.057     | 1.0                      | 0.035                                | 0.04                    | 0.036                             |           |
| Trunk        | HAE4003A, 1/4<br>Wave (450-<br>470MHz) | 2.15               | 470.0000         | 10.00             | 10.00                 | CW           | E            | 1.04                    | BS4 | 0.013            | 0.015                    | 0.02  | 0.027 | 0.027 | 0.036     | 0.047     | 0.064     | 0.059     | 0.059     | 1.0                      | 0.037                                | 0.04                    | 0.038                             |           |
|              |                                        |                    |                  |                   |                       |              |              |                         |     |                  |                          |       |       |       |           |           |           |           |           |                          |                                      |                         |                                   |           |
| Trunk        | HAE4003A, 1/4<br>Wave (450-<br>470MHz) | 2.15               | 450.0000         | 10.00             | 9.96                  | CW           | E            | 1.02                    | BS5 | 0.015            | 0.012                    | 0.012 | 0.018 | 0.028 | 0.038     | 0.033     | 0.039     | 0.041     | 0.032     | 1.0                      | 0.027                                | 0.03                    | 0.027                             |           |
| Trunk        | HAE4003A, 1/4<br>Wave (450-<br>470MHz) | 2.15               | 460.0000         | 10.00             | 9.90                  | CW           | E            | 1.03                    | BS5 | 0.01             | 0.009                    | 0.009 | 0.016 | 0.024 | 0.04      | 0.041     | 0.039     | 0.037     | 0.031     | 1.0                      | 0.026                                | 0.03                    | 0.027                             |           |
| Trunk        | HAE4003A, 1/4<br>Wave (450-<br>470MHz) | 2.15               | 470.0000         | 10.00             | 10.00                 | CW           | E            | 1.04                    | BS5 | 0.009            | 0.009                    | 0.012 | 0.02  | 0.036 | 0.041     | 0.044     | 0.045     | 0.03      | 0.029     | 1.0                      | 0.028                                | 0.03                    | 0.029                             |           |
|              |                                        |                    |                  |                   |                       |              |              |                         |     |                  |                          |       |       |       |           |           |           |           |           |                          |                                      |                         |                                   |           |
| Trunk        | HAE4004A, 1/4<br>Wave (470-<br>512MHz) | 2.15               | 470.0000         | 10.00             | 10.00                 | CW           | E            | 1.04                    | BS1 | 0.001            | 0.002                    | 0.001 | 0.002 | 0.004 | 0.006     | 0.008     | 0.011     | 0.009     | 0.011     | 1.0                      | 0.006                                | 0.01                    | 0.006                             |           |
| Trunk        | HAE4004A, 1/4<br>Wave (470-<br>512MHz) | 2.15               | 484.0000         | 10.00             | 9.61                  | CW           | E            | 1.05                    | BS1 | 0.002            | 0.002                    | 0.001 | 0.003 | 0.005 | 0.006     | 0.008     | 0.009     | 0.009     | 0.011     | 1.0                      | 0.006                                | 0.01                    | 0.006                             |           |
| Trunk        | HAE4004A, 1/4<br>Wave (470-<br>512MHz) | 2.15               | 498.0000         | 10.00             | 9.83                  | CW           | E            | 1.06                    | BS1 | 0.002            | 0.002                    | 0.002 | 0.002 | 0.003 | 0.003     | 0.006     | 0.007     | 0.01      | 0.011     | 1.0                      | 0.005                                | 0.01                    | 0.005                             |           |
| Trunk        | HAE4004A, 1/4<br>Wave (470-<br>512MHz) | 2.15               | 512.0000         | 10.00             | 9.75                  | CW           | E            | 1.06                    | BS1 | 0.004            | 0.004                    | 0.004 | 0.005 | 0.004 | 0.005     | 0.007     | 0.008     | 0.009     | 0.015     | 1.0                      | 0.007                                | 0.01                    | 0.007                             |           |

MPE calculations are defined in section 15.0.



**Table G.1 (Continued)**  
**DVR UHF - MPE measurement data for Bystander**

| D.U.T. Info. |                                 |                 |               |             |                 |           | Probe Info. |                   | Test Pos. | MPE Measurements         |       |       |       |        |        |        |        |        |        | DUT Max. TX Factor | Avg. over Body (mW/cm2) | Calc. P.D. (mW/cm2) | Max Calc. P.D. (mW/cm2) |
|--------------|---------------------------------|-----------------|---------------|-------------|-----------------|-----------|-------------|-------------------|-----------|--------------------------|-------|-------|-------|--------|--------|--------|--------|--------|--------|--------------------|-------------------------|---------------------|-------------------------|
| Ant Loc.     | Ant. Model/ Desc.               | Ant. Gain (dBi) | Tx Freq (MHz) | Max Pwr (W) | Initial Pwr (W) | Test Mode | E/H Field   | Probe Cal. Factor |           | Bystander (BS) Positions |       |       |       |        |        |        |        |        |        |                    |                         |                     |                         |
|              |                                 |                 |               |             |                 |           |             |                   |           | 20 cm                    | 40 cm | 60 cm | 80 cm | 100 cm | 120 cm | 140 cm | 160 cm | 180 cm | 200 cm |                    |                         |                     |                         |
| Trunk        | HAE4004A, 1/4 Wave (470-512MHz) | 2.15            | 470.0000      | 10.00       | 10.00           | CW        | E           | 1.04              | BS2       | 0.002                    | 0.003 | 0.003 | 0.004 | 0.007  | 0.01   | 0.014  | 0.017  | 0.019  | 0.024  | 1.0                | 0.010                   | 0.01                | 0.011                   |
| Trunk        | HAE4004A, 1/4 Wave (470-512MHz) | 2.15            | 484.0000      | 10.00       | 9.61            | CW        | E           | 1.05              | BS2       | 0.004                    | 0.005 | 0.005 | 0.007 | 0.009  | 0.015  | 0.017  | 0.018  | 0.022  | 0.033  | 1.0                | 0.014                   | 0.01                | 0.015                   |
| Trunk        | HAE4004A, 1/4 Wave (470-512MHz) | 2.15            | 498.0000      | 10.00       | 9.83            | CW        | E           | 1.06              | BS2       | 0.003                    | 0.003 | 0.006 | 0.01  | 0.012  | 0.014  | 0.019  | 0.027  | 0.034  | 0.035  | 1.0                | 0.016                   | 0.02                | 0.018                   |
| Trunk        | HAE4004A, 1/4 Wave (470-512MHz) | 2.15            | 512.0000      | 10.00       | 9.75            | CW        | E           | 1.06              | BS2       | 0.004                    | 0.006 | 0.009 | 0.014 | 0.019  | 0.024  | 0.034  | 0.039  | 0.04   | 0.036  | 1.0                | 0.023                   | 0.02                | 0.024                   |
|              |                                 |                 |               |             |                 |           |             |                   |           |                          |       |       |       |        |        |        |        |        |        |                    |                         |                     |                         |
| Trunk        | HAE4004A, 1/4 Wave (470-512MHz) | 2.15            | 470.0000      | 10.00       | 10.00           | CW        | E           | 1.04              | BS3       | 0.007                    | 0.007 | 0.012 | 0.016 | 0.025  | 0.033  | 0.041  | 0.044  | 0.039  | 0.029  | 1.0                | 0.025                   | 0.03                | 0.026                   |
| Trunk        | HAE4004A, 1/4 Wave (470-512MHz) | 2.15            | 484.0000      | 10.00       | 9.61            | CW        | E           | 1.05              | BS3       | 0.007                    | 0.008 | 0.012 | 0.019 | 0.029  | 0.029  | 0.033  | 0.042  | 0.042  | 0.036  | 1.0                | 0.026                   | 0.03                | 0.028                   |
| Trunk        | HAE4004A, 1/4 Wave (470-512MHz) | 2.15            | 498.0000      | 10.00       | 9.83            | CW        | E           | 1.06              | BS3       | 0.007                    | 0.007 | 0.011 | 0.015 | 0.021  | 0.028  | 0.037  | 0.037  | 0.041  | 0.027  | 1.0                | 0.023                   | 0.02                | 0.025                   |
| Trunk        | HAE4004A, 1/4 Wave (470-512MHz) | 2.15            | 512.0000      | 10.00       | 9.75            | CW        | E           | 1.06              | BS3       | 0.01                     | 0.01  | 0.011 | 0.015 | 0.023  | 0.028  | 0.031  | 0.031  | 0.035  | 0.034  | 1.0                | 0.023                   | 0.02                | 0.025                   |
|              |                                 |                 |               |             |                 |           |             |                   |           |                          |       |       |       |        |        |        |        |        |        |                    |                         |                     |                         |
| Trunk        | HAE4004A, 1/4 Wave (470-512MHz) | 2.15            | 470.0000      | 10.00       | 10.00           | CW        | E           | 1.04              | BS4       | 0.011                    | 0.013 | 0.017 | 0.024 | 0.027  | 0.036  | 0.042  | 0.056  | 0.054  | 0.049  | 1.0                | 0.033                   | 0.03                | 0.034                   |
| Trunk        | HAE4004A, 1/4 Wave (470-512MHz) | 2.15            | 484.0000      | 10.00       | 9.61            | CW        | E           | 1.05              | BS4       | 0.014                    | 0.014 | 0.015 | 0.02  | 0.028  | 0.04   | 0.054  | 0.056  | 0.055  | 0.05   | 1.0                | 0.035                   | 0.04                | 0.038                   |
| Trunk        | HAE4004A, 1/4 Wave (470-512MHz) | 2.15            | 498.0000      | 10.00       | 9.83            | CW        | E           | 1.06              | BS4       | 0.015                    | 0.013 | 0.017 | 0.019 | 0.024  | 0.033  | 0.051  | 0.061  | 0.054  | 0.043  | 1.0                | 0.033                   | 0.03                | 0.036                   |
| Trunk        | HAE4004A, 1/4 Wave (470-512MHz) | 2.15            | 512.0000      | 10.00       | 9.75            | CW        | E           | 1.06              | BS4       | 0.013                    | 0.01  | 0.015 | 0.02  | 0.028  | 0.044  | 0.05   | 0.056  | 0.053  | 0.045  | 1.0                | 0.033                   | 0.04                | 0.036                   |

MPE calculations are defined in section 15.0.

**Table G.1 (Continued)****DVR UHF - MPE measurement data for Bystander**

| D.U.T. Info. |                                        |                    |                  |                   |                       |              | Probe Info.  |                         |     | MPE Measurements |                          |       |       |       |           |           |           |           |           | DUT<br>Max. TX<br>Factor | Avg.<br>over<br>Body<br>(mW/<br>cm2) | Calc. P.D.<br>(mW/<br>cm2) | Max<br>Calc. P.D.<br>(mW/<br>cm2) |           |
|--------------|----------------------------------------|--------------------|------------------|-------------------|-----------------------|--------------|--------------|-------------------------|-----|------------------|--------------------------|-------|-------|-------|-----------|-----------|-----------|-----------|-----------|--------------------------|--------------------------------------|----------------------------|-----------------------------------|-----------|
| Ant<br>Loc.  | Ant. Model/<br>Desc.                   | Ant. Gain<br>(dBi) | Tx Freq<br>(MHz) | Max<br>Pwr<br>(W) | Initial<br>Pwr<br>(W) | Test<br>Mode | E/H<br>Field | Probe<br>Cal.<br>Factor |     | Test<br>Pos.     | Bystander (BS) Positions |       |       |       |           |           |           |           |           |                          |                                      |                            |                                   |           |
|              |                                        |                    |                  |                   |                       |              |              |                         |     |                  | 20 cm                    | 40 cm | 60 cm | 80 cm | 100<br>cm | 120<br>cm | 140<br>cm | 160<br>cm | 180<br>cm |                          |                                      |                            |                                   | 200<br>cm |
| Trunk        | HAE4004A, 1/4<br>Wave (470-<br>512MHz) | 2.15               | 470.0000         | 10.00             | 10.00                 | CW           | E            | 1.04                    | BS5 | 0.009            | 0.009                    | 0.013 | 0.022 | 0.031 | 0.047     | 0.049     | 0.054     | 0.036     | 0.033     | 1.0                      | 0.030                                | 0.03                       | 0.032                             |           |
| Trunk        | HAE4004A, 1/4<br>Wave (470-<br>512MHz) | 2.15               | 484.0000         | 10.00             | 9.61                  | CW           | E            | 1.05                    | BS5 | 0.011            | 0.01                     | 0.017 | 0.025 | 0.03  | 0.04      | 0.053     | 0.046     | 0.059     | 0.04      | 1.0                      | 0.033                                | 0.03                       | 0.036                             |           |
| Trunk        | HAE4004A, 1/4<br>Wave (470-<br>512MHz) | 2.15               | 498.0000         | 10.00             | 9.83                  | CW           | E            | 1.06                    | BS5 | 0.011            | 0.009                    | 0.013 | 0.013 | 0.027 | 0.037     | 0.043     | 0.056     | 0.052     | 0.037     | 1.0                      | 0.030                                | 0.03                       | 0.032                             |           |
| Trunk        | HAE4004A, 1/4<br>Wave (470-<br>512MHz) | 2.15               | 512.0000         | 10.00             | 9.75                  | CW           | E            | 1.06                    | BS5 | 0.009            | 0.009                    | 0.012 | 0.016 | 0.025 | 0.028     | 0.04      | 0.049     | 0.045     | 0.039     | 1.0                      | 0.027                                | 0.03                       | 0.030                             |           |

MPE calculations are defined in section 15.0.

**Table G.2**  
**DVR UHF - MPE measurement data for Passenger**

| D.U.T. Info. |                                    |                    |                  |                   |                       |              | Probe Info.  |                         |    | MPE Measurements                     |                         |                                  | DUT<br>Max. TX<br>Factor | Avg.<br>over<br>Body<br>(mW/<br>cm2) | Calc. P.D.<br>(mW/ cm2) | Max<br>Calc. P.D.<br>(mW/<br>cm2) |
|--------------|------------------------------------|--------------------|------------------|-------------------|-----------------------|--------------|--------------|-------------------------|----|--------------------------------------|-------------------------|----------------------------------|--------------------------|--------------------------------------|-------------------------|-----------------------------------|
| Ant<br>Loc.  | Ant. Model/<br>Desc.               | Ant. Gain<br>(dBi) | Tx Freq<br>(MHz) | Max<br>Pwr<br>(W) | Initial<br>Pwr<br>(W) | Test<br>Mode | E/H<br>Field | Probe<br>Cal.<br>Factor |    | Passenger/Operator (MC)<br>Positions |                         |                                  |                          |                                      |                         |                                   |
|              |                                    |                    |                  |                   |                       |              |              |                         |    | Head/<br>Top 1/3                     | Chest/<br>Middle<br>1/3 | Lower<br>Trunk/<br>Bottom<br>1/3 |                          |                                      |                         |                                   |
| Trunk        | HAE6012A, 1/4<br>Wave (380-433MHz) | 2.15               | 406.5000         | 10.00             | 9.68                  | CW           | E            | 0.99                    | PB | 0.059                                | 0.154                   | 0.092                            | 1.0                      | 0.102                                | 0.10                    | 0.104                             |
| Trunk        | HAE6012A, 1/4<br>Wave (380-433MHz) | 2.15               | 417.5000         | 10.00             | 9.90                  | CW           | E            | 0.99                    | PB | 0.081                                | 0.096                   | 0.098                            | 1.0                      | 0.092                                | 0.09                    | 0.092                             |
| Trunk        | HAE6012A, 1/4<br>Wave (380-433MHz) | 2.15               | 429.9875         | 10.00             | 9.60                  | CW           | E            | 1.00                    | PB | 0.081                                | 0.036                   | 0.069                            | 1.0                      | 0.062                                | 0.06                    | 0.065                             |
|              |                                    |                    |                  |                   |                       |              |              |                         |    |                                      |                         |                                  |                          |                                      |                         |                                   |
| Trunk        | HAE6012A, 1/4<br>Wave (380-433MHz) | 2.15               | 406.5000         | 10.00             | 9.68                  | CW           | E            | 0.99                    | PF | 0.051                                | 0.062                   | 0.015                            | 1.0                      | 0.043                                | 0.04                    | 0.044                             |
| Trunk        | HAE6012A, 1/4<br>Wave (380-433MHz) | 2.15               | 417.5000         | 10.00             | 9.90                  | CW           | E            | 0.99                    | PF | 0.031                                | 0.047                   | 0.007                            | 1.0                      | 0.028                                | 0.03                    | 0.028                             |
| Trunk        | HAE6012A, 1/4<br>Wave (380-433MHz) | 2.15               | 429.9875         | 10.00             | 9.60                  | CW           | E            | 1.00                    | PF | 0.033                                | 0.045                   | 0.023                            | 1.0                      | 0.034                                | 0.03                    | 0.035                             |
|              |                                    |                    |                  |                   |                       |              |              |                         |    |                                      |                         |                                  |                          |                                      |                         |                                   |
| Trunk        | HAE4003A, 1/4<br>Wave (450-470MHz) | 2.15               | 450.0000         | 10.00             | 9.96                  | CW           | E            | 1.02                    | PB | 0.177                                | 0.094                   | 0.178                            | 1.0                      | 0.150                                | 0.15                    | 0.153                             |
| Trunk        | HAE4003A, 1/4<br>Wave (450-470MHz) | 2.15               | 460.0000         | 10.00             | 9.90                  | CW           | E            | 1.03                    | PB | 0.187                                | 0.138                   | 0.144                            | 1.0                      | 0.156                                | 0.161                   | 0.163                             |
| Trunk        | HAE4003A, 1/4<br>Wave (450-470MHz) | 2.15               | 470.0000         | 10.00             | 10.00                 | CW           | E            | 1.04                    | PB | 0.157                                | 0.097                   | 0.094                            | 1.0                      | 0.116                                | 0.12                    | 0.121                             |

MPE calculations are defined in section 15.0.

**Table G.2 (Continued)**  
**DVR UHF - MPE measurement data for Passenger**

| D.U.T. Info. |                                 |                 |               |             |                 |           | Probe Info. |                   |    | MPE Measurements |                                   |                   |     |       |      |       |                         |
|--------------|---------------------------------|-----------------|---------------|-------------|-----------------|-----------|-------------|-------------------|----|------------------|-----------------------------------|-------------------|-----|-------|------|-------|-------------------------|
| Ant Loc.     | Ant. Model/ Desc.               | Ant. Gain (dBi) | Tx Freq (MHz) | Max Pwr (W) | Initial Pwr (W) | Test Mode | E/H Field   | Probe Cal. Factor |    | Test Pos.        | Passenger/Operator (MC) Positions |                   |     |       |      |       |                         |
|              |                                 |                 |               |             |                 |           |             |                   |    |                  | Head/ Top 1/3                     | Chest/ Middle 1/3 |     |       |      |       | Lower Trunk/ Bottom 1/3 |
| Trunk        | HAE4003A, 1/4 Wave (450-470MHz) | 2.15            | 450.0000      | 10.00       | 9.96            | CW        | E           | 1.02              | PF | 0.036            | 0.037                             | 0.037             | 1.0 | 0.037 | 0.04 | 0.038 |                         |
| Trunk        | HAE4003A, 1/4 Wave (450-470MHz) | 2.15            | 460.0000      | 10.00       | 9.90            | CW        | E           | 1.03              | PF | 0.042            | 0.043                             | 0.039             | 1.0 | 0.041 | 0.04 | 0.043 |                         |
| Trunk        | HAE4003A, 1/4 Wave (450-470MHz) | 2.15            | 470.0000      | 10.00       | 10.00           | CW        | E           | 1.04              | PF | 0.03             | 0.046                             | 0.037             | 1.0 | 0.038 | 0.04 | 0.039 |                         |
|              |                                 |                 |               |             |                 |           |             |                   |    |                  |                                   |                   |     |       |      |       |                         |
| Trunk        | HAE4004A, 1/4 Wave (470-512MHz) | 2.15            | 470.0000      | 10.00       | 10.00           | CW        | E           | 1.04              | PB | 0.175            | 0.098                             | 0.118             | 1.0 | 0.130 | 0.14 | 0.136 |                         |
| Trunk        | HAE4004A, 1/4 Wave (470-512MHz) | 2.15            | 484.0000      | 10.00       | 9.61            | CW        | E           | 1.05              | PB | 0.219            | 0.075                             | 0.14              | 1.0 | 0.145 | 0.15 | 0.158 |                         |
| Trunk        | HAE4004A, 1/4 Wave (470-512MHz) | 2.15            | 498.0000      | 10.00       | 9.83            | CW        | E           | 1.06              | PB | 0.126            | 0.076                             | 0.062             | 1.0 | 0.088 | 0.09 | 0.095 |                         |
| Trunk        | HAE4004A, 1/4 Wave (470-512MHz) | 2.15            | 512.0000      | 10.00       | 9.75            | CW        | E           | 1.06              | PB | 0.127            | 0.16                              | 0.11              | 1.0 | 0.132 | 0.14 | 0.144 |                         |
|              |                                 |                 |               |             |                 |           |             |                   |    |                  |                                   |                   |     |       |      |       |                         |
| Trunk        | HAE4004A, 1/4 Wave (470-512MHz) | 2.15            | 470.0000      | 10.00       | 10.00           | CW        | E           | 1.04              | PF | 0.021            | 0.029                             | 0.038             | 1.0 | 0.029 | 0.03 | 0.031 |                         |
| Trunk        | HAE4004A, 1/4 Wave (470-512MHz) | 2.15            | 484.0000      | 10.00       | 9.61            | CW        | E           | 1.05              | PF | 0.023            | 0.034                             | 0.020             | 1.0 | 0.026 | 0.03 | 0.028 |                         |
| Trunk        | HAE4004A, 1/4 Wave (470-512MHz) | 2.15            | 498.0000      | 10.00       | 9.83            | CW        | E           | 1.06              | PF | 0.031            | 0.033                             | 0.028             | 1.0 | 0.031 | 0.03 | 0.033 |                         |
| Trunk        | HAE4004A, 1/4 Wave (470-512MHz) | 2.15            | 512.0000      | 10.00       | 9.75            | CW        | E           | 1.06              | PF | 0.022            | 0.025                             | 0.055             | 1.0 | 0.034 | 0.04 | 0.037 |                         |

MPE calculations are defined in section 15.0.