

**MOTOROLA SOLUTIONS**

CERTIFICATE 2518.05

**DECLARATION OF COMPLIANCE: MPE ASSESSMENT Part 2 of 3**
**Motorola Solutions  
EME Test Laboratory**

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

**Date of Report:** 5/11/2017  
**Report Revision:** B

**Responsible Engineer:** Saw Sun Hock (EME Engineer)  
**Report author:** Saw Sun Hock (EME Engineer)  
**Date(s) Tested:** 3/8/2017-3/20/2017  
**Manufacturer:** Futurecom Systems Group  
**Date submitted for test:** 01/13/2017  
**DUT Description:** DVR 800 (806 - 870 MHz), Digital Vehicular Repeater  
Companion Mobile: APX8500 mobile All Bands (VHF, UHF, 7/800)  
**Test TX mode(s):** CW  
**Max. Power output:** **DVR:** 10W (100% duty cycle)  
**Companion Mobile:** 50% duty cycle, PTT with below maximum output power  
60W (136-174 MHz), 54W (380-484 MHz), 48W (485-512 MHz), 30W (512-520 MHz),  
36W (764-805 MHz), 42W (806-870 MHz); 10mW (Bluetooth); 2.5mW (Bluetooth LE);  
63.1 mW (WLAN 802.11b), 20 mW (WLAN 802.11g/n)  
**TX Frequency Bands:** **DVR:** 806-825 MHz, 851-870 MHz  
**Companion Mobile:**  
136-174 MHz; 380-520 MHz; 764-805 MHz; 806-870 MHz; WLAN 2400-2483.5 MHz;  
Bluetooth 2402-2480 MHz  
**Signaling type:** FM, TDMA, 802.11b/g/n (WLAN)  
**Model(s) Tested:** **DVR:** MOBEXCOM DVRS 800 (DQPM DVRS8000P)  
**Companion Mobile:** M37TSS9PW1AN  
**Model(s) Certified:** MOBEXCOM DVRS 800 (DQPM DVRS8000P)  
**Serial Number(s):** 17010530 (DVR) , KLDORDDUC (Companion Mobile)  
**Classification:** Occupational/Controlled Environment  
**FCC ID:** **DVR:** LO6-DVRS800  
806-824 MHz, 851-869 MHz  
**Companion Mobile:** AZ492FT7089  
150.8-173.4 MHz, 406.1-512 MHz, 769-775 MHz, 799-824 MHz, 851-869 MHz,  
2402-2480 MHz, 2412-2462 MHz  
This report contains results that are immaterial for FCC equipment approval, which are clearly identified.  
**IC:** **DVR:**2098B-DVRS800  
**Companion Mobile:**109U-92FT7089  
This report contains results that are immaterial for ISED 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 3.0 of this report. 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**  
**Approval Date:** 5/11/2017

## **Appendix D – MPE Test Results Summary for DVR 800**

**Table D.1****MPE assessment for DVR 800 - 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         | 1           | HAF4016A, 1/4 Wave (764-870MHz) | 10.0        | 10.00           | 806.0000      | 0.005                                | 0.54      | 0.9                 | 0.25       | 2.0                  |
|              |            |           |             |                                 |             | 9.95            | 815.0000      | 0.006                                | 0.54      | 1.0                 | 0.26       | 2.2                  |
|              |            |           |             |                                 |             | 9.85            | 824.0000      | 0.005                                | 0.55      | 0.8                 | 0.26       | 1.8                  |
|              |            |           |             |                                 |             | 9.91            | 851.0000      | 0.004                                | 0.57      | 0.7                 | 0.26       | 1.6                  |
|              |            |           |             |                                 |             | 10.00           | 860.0000      | 0.003                                | 0.57      | 0.5                 | 0.27       | 1.1                  |
|              |            |           |             |                                 |             | 10.00           | 869.0000      | 0.004                                | 0.58      | 0.6                 | 0.27       | 1.3                  |
| Trunk        | BS2        | E         | 1           | HAF4016A, 1/4 Wave (764-870MHz) | 10.0        | 10.00           | 806.0000      | 0.015                                | 0.54      | 2.8                 | 0.25       | 5.9                  |
|              |            |           |             |                                 |             | 9.95            | 815.0000      | 0.016                                | 0.54      | 2.9                 | 0.26       | 6.1                  |
|              |            |           |             |                                 |             | 9.85            | 824.0000      | 0.012                                | 0.55      | 2.2                 | 0.26       | 4.6                  |
|              |            |           |             |                                 |             | 9.91            | 851.0000      | 0.015                                | 0.57      | 2.7                 | 0.26       | 5.7                  |
|              |            |           |             |                                 |             | 10.00           | 860.0000      | 0.012                                | 0.57      | 2.1                 | 0.27       | 4.6                  |
|              |            |           |             |                                 |             | 10.00           | 869.0000      | 0.011                                | 0.58      | 1.8                 | 0.27       | 4.0                  |
| Trunk        | BS3        | E         | 1           | HAF4016A, 1/4 Wave (764-870MHz) | 10.0        | 10.00           | 806.0000      | 0.014                                | 0.54      | 2.6                 | 0.25       | 5.5                  |
|              |            |           |             |                                 |             | 9.95            | 815.0000      | 0.016                                | 0.54      | 3.0                 | 0.26       | 6.4                  |
|              |            |           |             |                                 |             | 9.85            | 824.0000      | 0.016                                | 0.55      | 2.9                 | 0.26       | 6.1                  |
|              |            |           |             |                                 |             | 9.91            | 851.0000      | 0.016                                | 0.57      | 2.8                 | 0.26       | 6.1                  |
|              |            |           |             |                                 |             | 10.00           | 860.0000      | 0.012                                | 0.57      | 2.2                 | 0.27       | 4.7                  |
|              |            |           |             |                                 |             | 10.00           | 869.0000      | 0.012                                | 0.58      | 2.0                 | 0.27       | 4.3                  |
| Trunk        | BS4        | E         | 1           | HAF4016A, 1/4 Wave (764-870MHz) | 10.0        | 10.00           | 806.0000      | 0.019                                | 0.54      | 3.5                 | 0.25       | 7.3                  |
|              |            |           |             |                                 |             | 9.95            | 815.0000      | 0.024                                | 0.54      | 4.4                 | 0.26       | 9.3                  |
|              |            |           |             |                                 |             | 9.85            | 824.0000      | 0.022                                | 0.55      | 4.0                 | 0.26       | 8.6                  |
|              |            |           |             |                                 |             | 9.91            | 851.0000      | 0.028                                | 0.57      | <b>4.9</b>          | 0.26       | <b>10.5</b>          |
|              |            |           |             |                                 |             | 10.00           | 860.0000      | 0.018                                | 0.57      | 3.1                 | 0.27       | 6.7                  |
|              |            |           |             |                                 |             | 10.00           | 869.0000      | 0.019                                | 0.58      | 3.3                 | 0.27       | 7.2                  |
| Trunk        | BS5        | E         | 1           | HAF4016A, 1/4 Wave (764-870MHz) | 10.0        | 10.00           | 806.0000      | 0.016                                | 0.54      | 3.0                 | 0.25       | 6.4                  |
|              |            |           |             |                                 |             | 9.95            | 815.0000      | 0.016                                | 0.54      | 3.0                 | 0.26       | 6.3                  |
|              |            |           |             |                                 |             | 9.85            | 824.0000      | 0.012                                | 0.55      | 2.2                 | 0.26       | 4.6                  |
|              |            |           |             |                                 |             | 9.91            | 851.0000      | 0.013                                | 0.57      | 2.3                 | 0.26       | 4.9                  |
|              |            |           |             |                                 |             | 10.00           | 860.0000      | 0.009                                | 0.57      | 1.6                 | 0.27       | 3.5                  |
|              |            |           |             |                                 |             | 10.00           | 869.0000      | 0.010                                | 0.58      | 1.7                 | 0.27       | 3.7                  |

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

**Table D.2**

MPE assessment for DVR 800– 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^2) | FCC Limit | % To FCC Spec Limit | ISED Limit | % To ISED Spec Limit |
|--------------|------------|-----------|-------------|---------------------------------|-------------|-----------------|---------------|--------------------------|-----------|---------------------|------------|----------------------|
| Trunk        | PB         | E         | 1           | HAF4016A, 1/4 Wave (764-870MHz) | 10.0        | 10.00           | 806.0000      | 0.056                    | 0.54      | 10.4                | 0.25       | 21.9                 |
|              |            |           |             |                                 |             | 9.95            | 815.0000      | 0.060                    | 0.54      | <b>11.1</b>         | 0.26       | <b>23.5</b>          |
|              |            |           |             |                                 |             | 9.85            | 824.0000      | 0.048                    | 0.55      | 8.7                 | 0.26       | 18.6                 |
|              |            |           |             |                                 |             | 9.91            | 851.0000      | 0.045                    | 0.57      | 7.9                 | 0.26       | 17.0                 |
|              |            |           |             |                                 |             | 10.00           | 860.0000      | 0.039                    | 0.57      | 6.8                 | 0.27       | 14.7                 |
|              |            |           |             |                                 |             | 10.00           | 869.0000      | 0.023                    | 0.58      | 4.0                 | 0.27       | 8.7                  |
| Trunk        | PF         | E         | 1           | HAF4016A, 1/4 Wave (764-870MHz) | 10.0        | 10.00           | 806.0000      | 0.026                    | 0.54      | 4.7                 | 0.25       | 10.1                 |
|              |            |           |             |                                 |             | 9.95            | 815.0000      | 0.026                    | 0.54      | 4.8                 | 0.26       | 10.2                 |
|              |            |           |             |                                 |             | 9.85            | 824.0000      | 0.024                    | 0.55      | 4.4                 | 0.26       | 9.3                  |
|              |            |           |             |                                 |             | 9.91            | 851.0000      | 0.031                    | 0.57      | 5.5                 | 0.26       | 11.9                 |
|              |            |           |             |                                 |             | 10.00           | 860.0000      | 0.028                    | 0.57      | 4.9                 | 0.27       | 10.6                 |
|              |            |           |             |                                 |             | 10.00           | 869.0000      | 0.034                    | 0.58      | 5.8                 | 0.27       | 12.7                 |

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

**Table D.3**  
**DVR 800 MPE Results for FCC**

|                                      |    |                                |       |      |      |      |       |       |
|--------------------------------------|----|--------------------------------|-------|------|------|------|-------|-------|
| <b>P<sub>max</sub> (W)</b>           | 10 | <b>P<sub>initial</sub> (W)</b> | 10.00 | 9.95 | 9.85 | 9.91 | 10.00 | 10.00 |
| <b>FCC Limit (mW/cm<sup>2</sup>)</b> |    |                                | 0.54  | 0.54 | 0.55 | 0.57 | 0.57  | 0.58  |

| Table | Test Post. | Angle | Trunk / Roof | E/H Field | Antenna No. | f1       | f2       | f3       | f4       | f5       | f6       |
|-------|------------|-------|--------------|-----------|-------------|----------|----------|----------|----------|----------|----------|
|       |            |       |              |           |             | 806.0000 | 815.0000 | 824.0000 | 851.0000 | 860.0000 | 869.0000 |
| D.1   | BS1        |       | Trunk        | E         | 1           | 0.005    | 0.006    | 0.005    | 0.004    | 0.003    | 0.004    |
| D.1   | BS2        |       | Trunk        | E         | 1           | 0.015    | 0.016    | 0.012    | 0.015    | 0.012    | 0.011    |
| D.1   | BS3        |       | Trunk        | E         | 1           | 0.014    | 0.016    | 0.016    | 0.016    | 0.012    | 0.012    |
| D.1   | BS4        |       | Trunk        | E         | 1           | 0.019    | 0.024    | 0.022    | 0.028    | 0.018    | 0.019    |
| D.1   | BS5        |       | Trunk        | E         | 1           | 0.016    | 0.016    | 0.012    | 0.013    | 0.009    | 0.010    |
|       |            |       |              |           |             |          |          |          |          |          |          |
| D.2   | PB         |       | Trunk        | E         | 1           | 0.056    | 0.060    | 0.047    | 0.044    | 0.039    | 0.023    |
| D.2   | PF         |       | Trunk        | E         | 1           | 0.026    | 0.026    | 0.024    | 0.031    | 0.028    | 0.034    |

## **Appendix E – MPE Test Results Summary for Companion Mobile LMR VHF**

**Table E.1****MPE assessment for Companion Mobile LMR VHF- 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         | 2           | AN000131A01, 1/4 wave (136-870MHz) | 60.0        | 58.3            | 146.0000      | 0.059                                | 0.20      | 29.7                | 0.13       | 46.0                 |
|              |            |           |             |                                    |             | 58.6            | 150.8000      | 0.072                                | 0.20      | 35.8                | 0.13       | 55.5                 |
|              |            |           |             |                                    |             | 58.6            | 158.0125      | 0.055                                | 0.20      | 27.7                | 0.13       | 43.0                 |
|              |            |           |             |                                    |             | 59.0            | 165.0125      | 0.046                                | 0.20      | 23.2                | 0.13       | 35.9                 |
|              |            |           |             |                                    |             | 59.3            | 173.0125      | 0.037                                | 0.20      | 18.7                | 0.13       | 28.9                 |
| Roof         | BS1        | H         | 2           | AN000131A01, 1/4 wave (136-870MHz) | 60.0        | 58.3            | 146.0000      | 0.081                                | 0.20      | 40.7                | 0.13       | 63.1                 |
|              |            |           |             |                                    |             | 58.6            | 150.8000      | 0.081                                | 0.20      | 40.4                | 0.13       | 62.6                 |
|              |            |           |             |                                    |             | 58.6            | 158.0125      | 0.063                                | 0.20      | 31.4                | 0.13       | 48.6                 |
|              |            |           |             |                                    |             | 59.0            | 165.0125      | 0.056                                | 0.20      | 27.8                | 0.13       | 43.1                 |
|              |            |           |             |                                    |             | 59.3            | 173.0125      | 0.045                                | 0.20      | 22.6                | 0.13       | 35.1                 |
| Roof         | BS2        | E         | 2           | AN000131A01, 1/4 wave (136-870MHz) | 60.0        | 58.3            | 146.0000      | 0.070                                | 0.20      | 35.2                | 0.13       | 54.6                 |
|              |            |           |             |                                    |             | 58.6            | 150.8000      | 0.067                                | 0.20      | 33.4                | 0.13       | 51.8                 |
|              |            |           |             |                                    |             | 58.6            | 158.0125      | 0.060                                | 0.20      | 30.0                | 0.13       | 46.4                 |
|              |            |           |             |                                    |             | 59.0            | 165.0125      | 0.052                                | 0.20      | 25.9                | 0.13       | 40.1                 |
|              |            |           |             |                                    |             | 59.3            | 173.0125      | 0.036                                | 0.20      | 18.0                | 0.13       | 27.8                 |
| Roof         | BS2        | H         | 2           | AN000131A01, 1/4 wave (136-870MHz) | 60.0        | 58.3            | 146.0000      | 0.061                                | 0.20      | 30.6                | 0.13       | 47.5                 |
|              |            |           |             |                                    |             | 58.6            | 150.8000      | 0.061                                | 0.20      | 30.4                | 0.13       | 47.1                 |
|              |            |           |             |                                    |             | 58.6            | 158.0125      | 0.075                                | 0.20      | 37.3                | 0.13       | 57.8                 |
|              |            |           |             |                                    |             | 59.0            | 165.0125      | 0.068                                | 0.20      | 33.9                | 0.13       | 52.6                 |
|              |            |           |             |                                    |             | 59.3            | 173.0125      | 0.070                                | 0.20      | 35.1                | 0.13       | 54.3                 |
| Roof         | BS3        | E         | 2           | AN000131A01, 1/4 wave (136-870MHz) | 60.0        | 58.3            | 146.0000      | 0.064                                | 0.20      | 31.8                | 0.13       | 49.3                 |
|              |            |           |             |                                    |             | 58.6            | 150.8000      | 0.045                                | 0.20      | 22.4                | 0.13       | 34.7                 |
|              |            |           |             |                                    |             | 58.6            | 158.0125      | 0.051                                | 0.20      | 25.4                | 0.13       | 39.3                 |
|              |            |           |             |                                    |             | 59.0            | 165.0125      | 0.052                                | 0.20      | 26.0                | 0.13       | 40.3                 |
|              |            |           |             |                                    |             | 59.3            | 173.0125      | 0.047                                | 0.20      | 23.6                | 0.13       | 36.5                 |
| Roof         | BS3        | H         | 2           | AN000131A01, 1/4 wave (136-870MHz) | 60.0        | 58.3            | 146.0000      | 0.036                                | 0.20      | 17.9                | 0.13       | 27.8                 |
|              |            |           |             |                                    |             | 58.6            | 150.8000      | 0.040                                | 0.20      | 19.9                | 0.13       | 30.8                 |
|              |            |           |             |                                    |             | 58.6            | 158.0125      | 0.041                                | 0.20      | 20.7                | 0.13       | 32.0                 |
|              |            |           |             |                                    |             | 59.0            | 165.0125      | 0.032                                | 0.20      | 16.0                | 0.13       | 24.8                 |
|              |            |           |             |                                    |             | 59.3            | 173.0125      | 0.031                                | 0.20      | 15.5                | 0.13       | 24.0                 |

Notes:

Blue fonts: Frequencies not regulated by FCC.

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

**Table E.1 (continued)**

MPE assessment for Companion Mobile LMR VHF- roof mounted antenna - Bystander

| Trunk/<br>Roof | Test<br>Post. | E/H<br>Field | Antenna<br>No. | Antenna Model                            | Max Pwr<br>(W) | Initial Pwr<br>(W) | Tx Freq<br>(MHz) | Max Calc.<br>P.D.<br>(mW/cm <sup>2</sup> ) | FCC Limit | % To FCC<br>Spec Limit | ISED<br>Limit | % To ISED<br>Spec Limit |
|----------------|---------------|--------------|----------------|------------------------------------------|----------------|--------------------|------------------|--------------------------------------------|-----------|------------------------|---------------|-------------------------|
| Roof           | BS4           | E            | 2              | AN000131A01,<br>1/4 wave<br>(136-870MHz) | 60.0           | 58.3               | 146.0000         | 0.037                                      | 0.20      | 18.6                   | 0.13          | 28.8                    |
|                |               |              |                |                                          |                | 58.6               | 150.8000         | 0.037                                      | 0.20      | 18.6                   | 0.13          | 28.8                    |
|                |               |              |                |                                          |                | 58.6               | 158.0125         | 0.049                                      | 0.20      | 24.7                   | 0.13          | 38.3                    |
|                |               |              |                |                                          |                | 59.0               | 165.0125         | 0.029                                      | 0.20      | 14.7                   | 0.13          | 22.7                    |
|                |               |              |                |                                          |                | 59.3               | 173.0125         | 0.039                                      | 0.20      | 19.6                   | 0.13          | 30.4                    |
| Roof           | BS4           | H            | 2              | AN000131A01,<br>1/4 wave<br>(136-870MHz) | 60.0           | 58.3               | 146.0000         | 0.020                                      | 0.20      | 10.0                   | 0.13          | 15.5                    |
|                |               |              |                |                                          |                | 58.6               | 150.8000         | 0.031                                      | 0.20      | 15.7                   | 0.13          | 24.3                    |
|                |               |              |                |                                          |                | 58.6               | 158.0125         | 0.023                                      | 0.20      | 11.5                   | 0.13          | 17.9                    |
|                |               |              |                |                                          |                | 59.0               | 165.0125         | 0.022                                      | 0.20      | 11.2                   | 0.13          | 17.4                    |
|                |               |              |                |                                          |                | 59.3               | 173.0125         | 0.026                                      | 0.20      | 13.2                   | 0.13          | 20.5                    |
| Roof           | BS5           | E            | 2              | AN000131A01,<br>1/4 wave<br>(136-870MHz) | 60.0           | 58.3               | 146.0000         | 0.019                                      | 0.20      | 9.5                    | 0.13          | 14.8                    |
|                |               |              |                |                                          |                | 58.6               | 150.8000         | 0.019                                      | 0.20      | 9.4                    | 0.13          | 14.6                    |
|                |               |              |                |                                          |                | 58.6               | 158.0125         | 0.034                                      | 0.20      | 16.8                   | 0.13          | 26.0                    |
|                |               |              |                |                                          |                | 59.0               | 165.0125         | 0.017                                      | 0.20      | 8.6                    | 0.13          | 13.3                    |
|                |               |              |                |                                          |                | 59.3               | 173.0125         | 0.019                                      | 0.20      | 9.5                    | 0.13          | 14.6                    |
| Roof           | BS5           | H            | 2              | AN000131A01,<br>1/4 wave<br>(136-870MHz) | 60.0           | 58.3               | 146.0000         | 0.013                                      | 0.20      | 6.7                    | 0.13          | 10.3                    |
|                |               |              |                |                                          |                | 58.6               | 150.8000         | 0.017                                      | 0.20      | 8.5                    | 0.13          | 13.2                    |
|                |               |              |                |                                          |                | 58.6               | 158.0125         | 0.015                                      | 0.20      | 7.6                    | 0.13          | 11.8                    |
|                |               |              |                |                                          |                | 59.0               | 165.0125         | 0.022                                      | 0.20      | 10.9                   | 0.13          | 16.8                    |
|                |               |              |                |                                          |                | 59.3               | 173.0125         | 0.015                                      | 0.20      | 7.6                    | 0.13          | 11.7                    |

Notes:

Blue fonts: Frequencies not regulated by FCC.

**Table E.2****MPE assessment for Companion Mobile LMR VHF- roof 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 |
|--------------|------------|-----------|-------------|------------------------------------|-------------|-----------------|---------------|--------------------------------------|-----------|---------------------|------------|----------------------|
| Roof         | PB         | E         | 2           | AN000131A01, 1/4 wave (136-870MHz) | 60.0        | 58.3            | 146.0000      | 0.128                                | 0.20      | 64.1                | 0.13       | 99.3                 |
|              |            |           |             |                                    |             | 58.6            | 150.8000      | 0.108                                | 0.20      | 54.0                | 0.13       | 83.7                 |
|              |            |           |             |                                    |             | 58.6            | 158.0125      | 0.127                                | 0.20      | 63.5                | 0.13       | 98.4                 |
|              |            |           |             |                                    |             | 59.0            | 165.0125      | 0.073                                | 0.20      | 36.5                | 0.13       | 56.6                 |
|              |            |           |             |                                    |             | 59.3            | 173.0125      | 0.047                                | 0.20      | 23.3                | 0.13       | 36.1                 |
| Roof         | PB         | H         | 2           | AN000131A01, 1/4 wave (136-870MHz) | 60.0        | 58.3            | 146.0000      | 0.100                                | 0.20      | 50.2                | 0.13       | 77.7                 |
|              |            |           |             |                                    |             | 58.6            | 150.8000      | 0.116                                | 0.20      | 57.9                | 0.13       | 89.6                 |
|              |            |           |             |                                    |             | 58.6            | 158.0125      | 0.123                                | 0.20      | 61.7                | 0.13       | 95.6                 |
|              |            |           |             |                                    |             | 59.0            | 165.0125      | 0.057                                | 0.20      | 28.7                | 0.13       | 44.4                 |
|              |            |           |             |                                    |             | 59.3            | 173.0125      | 0.021                                | 0.20      | 10.4                | 0.13       | 16.1                 |
| Roof         | PF         | E         | 2           | AN000131A01, 1/4 wave (136-870MHz) | 60.0        | 58.3            | 146.0000      | 0.036                                | 0.20      | 18.1                | 0.13       | 28.1                 |
|              |            |           |             |                                    |             | 58.6            | 150.8000      | 0.033                                | 0.20      | 16.7                | 0.13       | 25.9                 |
|              |            |           |             |                                    |             | 58.6            | 158.0125      | 0.046                                | 0.20      | 22.8                | 0.13       | 35.3                 |
|              |            |           |             |                                    |             | 59.0            | 165.0125      | 0.051                                | 0.20      | 25.3                | 0.13       | 39.1                 |
|              |            |           |             |                                    |             | 59.3            | 173.0125      | 0.028                                | 0.20      | 14.2                | 0.13       | 22.0                 |
| Roof         | PF         | H         | 2           | AN000131A01, 1/4 wave (136-870MHz) | 60.0        | 58.3            | 146.0000      | 0.059                                | 0.20      | 29.4                | 0.13       | 45.6                 |
|              |            |           |             |                                    |             | 58.6            | 150.8000      | 0.043                                | 0.20      | 21.6                | 0.13       | 33.4                 |
|              |            |           |             |                                    |             | 58.6            | 158.0125      | 0.061                                | 0.20      | 30.5                | 0.13       | 47.2                 |
|              |            |           |             |                                    |             | 59.0            | 165.0125      | 0.063                                | 0.20      | 31.4                | 0.13       | 48.6                 |
|              |            |           |             |                                    |             | 59.3            | 173.0125      | 0.028                                | 0.20      | 14.0                | 0.13       | 21.7                 |

## Notes:

Blue fonts: Frequencies not regulated by FCC.

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

**Table E.3**  
**Companion Mobile LMR VHF MPE Results for FCC**

|                            |                                     |      |      |      |      |
|----------------------------|-------------------------------------|------|------|------|------|
| <b>P<sub>max</sub> (W)</b> | <b>P<sub>initial</sub> (W)</b>      |      |      |      |      |
| 60                         |                                     | 58.3 | 58.6 | 58.6 | 59.0 |
|                            | <b>FCCLimit (mW/cm<sup>2</sup>)</b> | 0.20 | 0.20 | 0.20 | 0.20 |

|              |                   |              |                     |                  |                    | <b>f1</b>       | <b>f2</b>       | <b>f3</b>       | <b>f4</b>       | <b>f5</b>       |
|--------------|-------------------|--------------|---------------------|------------------|--------------------|-----------------|-----------------|-----------------|-----------------|-----------------|
| <b>Table</b> | <b>Test Post.</b> | <b>Angle</b> | <b>Trunk / Roof</b> | <b>E/H Field</b> | <b>Antenna No.</b> | <b>146.0000</b> | <b>150.8000</b> | <b>158.0125</b> | <b>165.0125</b> | <b>173.0125</b> |
| E.1          | BS1               |              | Roof                | E                | 2                  | 0.059           | 0.072           | 0.055           | 0.046           | 0.037           |
| E.1          | BS2               |              | Roof                | E                | 2                  | 0.070           | 0.067           | 0.060           | 0.052           | 0.036           |
| E.1          | BS3               |              | Roof                | E                | 2                  | 0.064           | 0.045           | 0.051           | 0.052           | 0.047           |
| E.1          | BS4               |              | Roof                | E                | 2                  | 0.037           | 0.037           | 0.049           | 0.029           | 0.039           |
| E.1          | BS5               |              | Roof                | E                | 2                  | 0.019           | 0.019           | 0.034           | 0.017           | 0.019           |
|              |                   |              |                     |                  |                    |                 |                 |                 |                 |                 |
| E.1          | BS1               |              | Roof                | H                | 2                  | 0.081           | 0.081           | 0.063           | 0.056           | 0.045           |
| E.1          | BS2               |              | Roof                | H                | 2                  | 0.061           | 0.061           | 0.075           | 0.068           | 0.070           |
| E.1          | BS3               |              | Roof                | H                | 2                  | 0.036           | 0.040           | 0.041           | 0.032           | 0.031           |
| E.1          | BS4               |              | Roof                | H                | 2                  | 0.020           | 0.031           | 0.023           | 0.022           | 0.026           |
| E.1          | BS5               |              | Roof                | H                | 2                  | 0.013           | 0.017           | 0.015           | 0.022           | 0.015           |
|              |                   |              |                     |                  |                    |                 |                 |                 |                 |                 |
| E.2          | PB                |              | Roof                | E                | 2                  | 0.128           | 0.108           | 0.127           | 0.073           | 0.047           |
| E.2          | PF                |              | Roof                | E                | 2                  | 0.036           | 0.033           | 0.046           | 0.051           | 0.028           |
|              |                   |              |                     |                  |                    |                 |                 |                 |                 |                 |
| E.2          | PB                |              | Roof                | H                | 2                  | 0.100           | 0.116           | 0.123           | 0.057           | 0.021           |
| E.2          | PF                |              | Roof                | H                | 2                  | 0.059           | 0.043           | 0.061           | 0.063           | 0.028           |

Note:

Blue fonts: Frequencies not regulated by FCC.

## **Appendix F – MPE Test Results Summary for Companion Mobile LMR UHF R1**

**Table F.1****MPE assessment for Companion Mobile LMR UHF1- 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         | 2           | AN000131A01, 1/4 wave (136-870MHz) | 54.0        | 53.4            | 406.5000      | 0.019                                | 0.27      | 6.9                 | 0.16       | 11.7                 |
|              |            |           |             |                                    |             | 53.5            | 422.0125      | 0.029                                | 0.28      | 10.4                | 0.16       | <b>17.9</b>          |
|              |            |           |             |                                    |             | 53.0            | 438.0125      | 0.042                                | 0.29      | <b>14.2</b>         | NA         | NA                   |
|              |            |           |             |                                    |             | 53.2            | 450.0125      | 0.028                                | 0.30      | 9.2                 | 0.17       | 16.3                 |
|              |            |           |             |                                    |             | 53.3            | 469.9875      | 0.030                                | 0.31      | 9.7                 | 0.18       | 17.4                 |
| Roof         | BS2        | E         | 2           | AN000131A01, 1/4 wave (136-870MHz) | 54.0        | 53.4            | 406.5000      | 0.015                                | 0.27      | 5.6                 | 0.16       | 9.5                  |
|              |            |           |             |                                    |             | 53.5            | 422.0125      | 0.016                                | 0.28      | 5.7                 | 0.16       | 9.9                  |
|              |            |           |             |                                    |             | 53.0            | 438.0125      | 0.023                                | 0.29      | 8.0                 | NA         | NA                   |
|              |            |           |             |                                    |             | 53.2            | 450.0125      | 0.018                                | 0.30      | 5.9                 | 0.17       | 10.3                 |
|              |            |           |             |                                    |             | 53.3            | 469.9875      | 0.021                                | 0.31      | 6.7                 | 0.18       | 11.9                 |
| Roof         | BS3        | E         | 2           | AN000131A01, 1/4 wave (136-870MHz) | 54.0        | 53.4            | 406.5000      | 0.014                                | 0.27      | 5.0                 | 0.16       | 8.5                  |
|              |            |           |             |                                    |             | 53.5            | 422.0125      | 0.015                                | 0.28      | 5.2                 | 0.16       | 8.9                  |
|              |            |           |             |                                    |             | 53.0            | 438.0125      | 0.019                                | 0.29      | 6.4                 | NA         | NA                   |
|              |            |           |             |                                    |             | 53.2            | 450.0125      | 0.015                                | 0.30      | 5.1                 | 0.17       | 9.0                  |
|              |            |           |             |                                    |             | 53.3            | 469.9875      | 0.018                                | 0.31      | 5.9                 | 0.18       | 10.5                 |
| Roof         | BS4        | E         | 2           | AN000131A01, 1/4 wave (136-870MHz) | 54.0        | 53.4            | 406.5000      | 0.007                                | 0.27      | 2.7                 | 0.16       | 4.5                  |
|              |            |           |             |                                    |             | 53.5            | 422.0125      | 0.007                                | 0.28      | 2.5                 | 0.16       | 4.4                  |
|              |            |           |             |                                    |             | 53.0            | 438.0125      | 0.008                                | 0.29      | 2.6                 | NA         | NA                   |
|              |            |           |             |                                    |             | 53.2            | 450.0125      | 0.006                                | 0.30      | 2.1                 | 0.17       | 3.6                  |
|              |            |           |             |                                    |             | 53.3            | 469.9875      | 0.007                                | 0.31      | 2.2                 | 0.18       | 3.9                  |
| Roof         | BS5        | E         | 2           | AN000131A01, 1/4 wave (136-870MHz) | 54.0        | 53.4            | 406.5000      | 0.003                                | 0.27      | 1.1                 | 0.16       | 1.9                  |
|              |            |           |             |                                    |             | 53.5            | 422.0125      | 0.003                                | 0.28      | 1.1                 | 0.16       | 1.9                  |
|              |            |           |             |                                    |             | 53.0            | 438.0125      | 0.005                                | 0.29      | 1.7                 | NA         | NA                   |
|              |            |           |             |                                    |             | 53.2            | 450.0125      | 0.003                                | 0.30      | 1.1                 | 0.17       | 1.9                  |
|              |            |           |             |                                    |             | 53.3            | 469.9875      | 0.004                                | 0.31      | 1.1                 | 0.18       | 2.0                  |

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

**Table F.2****MPE assessment for Companion Mobile LMR UHF1- roof 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 |
|--------------|------------|-----------|-------------|------------------------------------|-------------|-----------------|---------------|--------------------------------------|-----------|---------------------|------------|----------------------|
| Roof         | PB         | E         | 2           | AN000131A01, 1/4 wave (136-870MHz) | 54.0        | 53.4            | 406.5000      | 0.044                                | 0.27      | 16.3                | 0.16       | <b>27.7</b>          |
|              |            |           |             |                                    |             | 53.5            | 422.0125      | 0.027                                | 0.28      | 9.4                 | 0.16       | 16.3                 |
|              |            |           |             |                                    |             | 53.0            | 438.0125      | 0.056                                | 0.29      | <b>19.1</b>         | NA         | NA                   |
|              |            |           |             |                                    |             | 53.2            | 450.0125      | 0.037                                | 0.30      | 12.3                | 0.17       | 21.7                 |
|              |            |           |             |                                    |             | 53.3            | 469.9875      | 0.032                                | 0.31      | 10.1                | 0.18       | 18.0                 |
| Roof         | PF         | E         | 2           | AN000131A01, 1/4 wave (136-870MHz) | 54.0        | 53.4            | 406.5000      | 0.002                                | 0.27      | 0.8                 | 0.16       | 1.4                  |
|              |            |           |             |                                    |             | 53.5            | 422.0125      | 0.005                                | 0.28      | 1.9                 | 0.16       | 3.2                  |
|              |            |           |             |                                    |             | 53.0            | 438.0125      | 0.004                                | 0.29      | 1.5                 | NA         | NA                   |
|              |            |           |             |                                    |             | 53.2            | 450.0125      | 0.008                                | 0.30      | 2.5                 | 0.17       | 4.5                  |
|              |            |           |             |                                    |             | 53.3            | 469.9875      | 0.005                                | 0.31      | 1.6                 | 0.18       | 2.8                  |

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

**Table F.3**  
**Companion Mobile LMR UHF1 MPE Results for FCC**

|          |    |                    |  |  |  |      |      |      |      |      |
|----------|----|--------------------|--|--|--|------|------|------|------|------|
| Pmax (W) | 54 | Pinitial (W)       |  |  |  | 53.4 | 53.5 | 53.0 | 53.2 | 53.3 |
|          |    | FCCLimit (mW/cm^2) |  |  |  | 0.27 | 0.28 | 0.29 | 0.30 | 0.31 |

| Table | Test Post. | Angle | Trunk / Roof | E/H Field | Antenna No. | f1       | f2       | f3       | f4       | f5       |
|-------|------------|-------|--------------|-----------|-------------|----------|----------|----------|----------|----------|
|       |            |       |              |           |             | 406.5000 | 422.0125 | 438.0125 | 450.0125 | 469.9875 |
| F.1   | BS1        |       | Trunk        | E         | 2           | 0.019    | 0.029    | 0.042    | 0.028    | 0.030    |
| F.1   | BS2        |       | Trunk        | E         | 2           | 0.015    | 0.016    | 0.023    | 0.018    | 0.021    |
| F.1   | BS3        |       | Trunk        | E         | 2           | 0.014    | 0.015    | 0.019    | 0.015    | 0.018    |
| F.1   | BS4        |       | Trunk        | E         | 2           | 0.007    | 0.007    | 0.008    | 0.006    | 0.007    |
| F.1   | BS5        |       | Trunk        | E         | 2           | 0.003    | 0.003    | 0.005    | 0.003    | 0.004    |
|       |            |       |              |           |             |          |          |          |          |          |
| F.2   | PB         |       | Trunk        | E         | 2           | 0.044    | 0.027    | 0.056    | 0.037    | 0.032    |
| F.2   | PF         |       | Trunk        | E         | 2           | 0.002    | 0.005    | 0.004    | 0.008    | 0.005    |

## **Appendix G – MPE Test Results Summary for Companion Mobile LMR UHF R2**

**Table G.1**

MPE assessment for Companion Mobile LMR UHF2- 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         | 2           | AN000131A01, 1/4 wave (136-870MHz) | 54.0        | 53.2            | 450.0125      | 0.028                                | 0.30      | 9.2                 | 0.17       | 16.3                 |
|              |            |           |             |                                    |             | 53.3            | 469.9875      | 0.030                                | 0.31      | 9.7                 | 0.18       | <b>17.4</b>          |
|              |            |           |             |                                    |             | 53.5            | 482.5000      | 0.032                                | 0.32      | 9.9                 | NA         | NA                   |
|              |            |           |             |                                    | 48.0        | 46.7            | 496.5000      | 0.026                                | 0.33      | 8.0                 | NA         | NA                   |
|              |            |           |             |                                    |             | 47.5            | 511.9875      | 0.038                                | 0.34      | <b>11.1</b>         | NA         | NA                   |
| Roof         | BS2        | E         | 2           | AN000131A01, 1/4 wave (136-870MHz) | 54.0        | 53.2            | 450.0125      | 0.018                                | 0.30      | 5.9                 | 0.17       | 10.3                 |
|              |            |           |             |                                    |             | 53.3            | 469.9875      | 0.021                                | 0.31      | 6.7                 | 0.18       | 11.9                 |
|              |            |           |             |                                    |             | 53.5            | 482.5000      | 0.023                                | 0.32      | 7.3                 | NA         | NA                   |
|              |            |           |             |                                    | 48.0        | 46.7            | 496.5000      | 0.022                                | 0.33      | 6.7                 | NA         | NA                   |
|              |            |           |             |                                    |             | 47.5            | 511.9875      | 0.031                                | 0.34      | 9.0                 | NA         | NA                   |
| Roof         | BS3        | E         | 2           | AN000131A01, 1/4 wave (136-870MHz) | 54.0        | 53.2            | 450.0125      | 0.015                                | 0.30      | 5.1                 | 0.17       | 9.0                  |
|              |            |           |             |                                    |             | 53.3            | 469.9875      | 0.018                                | 0.31      | 5.9                 | 0.18       | 10.5                 |
|              |            |           |             |                                    |             | 53.5            | 482.5000      | 0.021                                | 0.32      | 6.6                 | NA         | NA                   |
|              |            |           |             |                                    | 48.0        | 46.7            | 496.5000      | 0.017                                | 0.33      | 5.3                 | NA         | NA                   |
|              |            |           |             |                                    |             | 47.5            | 511.9875      | 0.021                                | 0.34      | 6.1                 | NA         | NA                   |
| Roof         | BS4        | E         | 2           | AN000131A01, 1/4 wave (136-870MHz) | 54.0        | 53.2            | 450.0125      | 0.006                                | 0.30      | 2.1                 | 0.17       | 3.6                  |
|              |            |           |             |                                    |             | 53.3            | 469.9875      | 0.007                                | 0.31      | 2.2                 | 0.18       | 3.9                  |
|              |            |           |             |                                    |             | 53.5            | 482.5000      | 0.007                                | 0.32      | 2.3                 | NA         | NA                   |
|              |            |           |             |                                    | 48.0        | 46.7            | 496.5000      | 0.008                                | 0.33      | 2.3                 | NA         | NA                   |
|              |            |           |             |                                    |             | 47.5            | 511.9875      | 0.011                                | 0.34      | 3.2                 | NA         | NA                   |
| Roof         | BS5        | E         | 2           | AN000131A01, 1/4 wave (136-870MHz) | 54.0        | 53.2            | 450.0125      | 0.003                                | 0.30      | 1.1                 | 0.17       | 1.9                  |
|              |            |           |             |                                    |             | 53.3            | 469.9875      | 0.004                                | 0.31      | 1.1                 | 0.18       | 2.0                  |
|              |            |           |             |                                    |             | 53.5            | 482.5000      | 0.005                                | 0.32      | 1.7                 | NA         | NA                   |
|              |            |           |             |                                    | 48.0        | 46.7            | 496.5000      | 0.005                                | 0.33      | 1.4                 | NA         | NA                   |
|              |            |           |             |                                    |             | 47.5            | 511.9875      | 0.007                                | 0.34      | 2.1                 | NA         | NA                   |

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

**Table G.2**

MPE assessment for Companion Mobile LMR UHF2- roof 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^2) | FCC Limit | % To FCC Spec Limit | ISED Limit | % To ISED Spec Limit |
|--------------|------------|-----------|-------------|------------------------------------|-------------|-----------------|---------------|--------------------------|-----------|---------------------|------------|----------------------|
| Roof         | PB         | E         | 2           | AN000131A01, 1/4 wave (136-870MHz) | 54.0        | 53.2            | 450.0125      | 0.037                    | 0.30      | 12.3                | 0.17       | <b>21.7</b>          |
|              |            |           |             |                                    |             | 53.3            | 469.9875      | 0.032                    | 0.31      | 10.1                | 0.18       | 18.0                 |
|              |            |           |             |                                    |             | 53.5            | 482.5000      | 0.026                    | 0.32      | 8.0                 | NA         | NA                   |
|              |            |           |             |                                    | 48.0        | 46.7            | 496.5000      | 0.022                    | 0.33      | 6.5                 | NA         | NA                   |
|              |            |           |             |                                    |             | 47.5            | 511.9875      | 0.022                    | 0.34      | 6.6                 | NA         | NA                   |
| Roof         | PF         | E         | 2           | HAE6031A, 1/2 Wave (380-520MHz)    | 54.0        | 53.2            | 450.0125      | 0.008                    | 0.30      | 2.5                 | 0.17       | 4.5                  |
|              |            |           |             |                                    |             | 53.3            | 469.9875      | 0.005                    | 0.31      | 1.6                 | 0.18       | 2.8                  |
|              |            |           |             |                                    |             | 53.5            | 482.5000      | 0.020                    | 0.32      | 6.3                 | NA         | NA                   |
|              |            |           |             |                                    | 48.0        | 46.7            | 496.5000      | 0.045                    | 0.33      | <b>13.6</b>         | NA         | NA                   |
|              |            |           |             |                                    |             | 47.5            | 511.9875      | 0.034                    | 0.34      | 9.9                 | NA         | NA                   |

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

**Table G.3**  
**Companion Mobile LMR UHF2 MPE Results for FCC**

|                            |       |                                        |      |      |      |      |      |
|----------------------------|-------|----------------------------------------|------|------|------|------|------|
| <b>P<sub>max</sub></b> (W) | 54/48 | <b>P<sub>initial</sub></b> (W)         | 53.2 | 53.3 | 53.5 | 46.7 | 47.5 |
|                            |       | <b>FCC Limit</b> (mW/cm <sup>2</sup> ) | 0.30 | 0.31 | 0.32 | 0.33 | 0.34 |

| Table | Test Post. | Angle | Trunk / Roof | E/H Field | Antenna No. | f1       | f2       | f3       | f4       | f5       |
|-------|------------|-------|--------------|-----------|-------------|----------|----------|----------|----------|----------|
|       |            |       |              |           |             | 450.0125 | 469.9875 | 482.5000 | 496.5000 | 511.9875 |
| G.1   | BS1        |       | Roof         | E         | 2           | 0.028    | 0.030    | 0.032    | 0.026    | 0.038    |
| G.1   | BS2        |       | Roof         | E         | 2           | 0.018    | 0.021    | 0.023    | 0.022    | 0.031    |
| G.1   | BS3        |       | Roof         | E         | 2           | 0.015    | 0.018    | 0.021    | 0.017    | 0.021    |
| G.1   | BS4        |       | Roof         | E         | 2           | 0.006    | 0.007    | 0.007    | 0.008    | 0.011    |
| G.1   | BS5        |       | Roof         | E         | 2           | 0.003    | 0.004    | 0.005    | 0.005    | 0.007    |
|       |            |       |              |           | 2           |          |          |          |          |          |
| G.2   | PB         |       | Roof         | E         | 2           | 0.037    | 0.032    | 0.026    | 0.022    | 0.022    |
| G.2   | PF         |       | Roof         | E         | 2           | 0.008    | 0.005    | 0.020    | 0.045    | 0.034    |

## **Appendix H – MPE Test Results Summary for Companion Mobile LMR 7/800**

**Table H.1****MPE assessment for Companion Mobile LMR 7/800- 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         | 2           | AN000131A01, 1/4 wave (136-870MHz) | 36.0        | 36.0            | 770.0125      | 0.033                                | 0.51      | <b>6.4</b>          | 0.25       | <b>13.3</b>          |
|              |            |           |             |                                    |             | 36.0            | 775.9125      | 0.026                                | 0.52      | 5.1                 | 0.25       | 10.6                 |
|              |            |           |             |                                    | 42.0        | 41.6            | 806.0125      | 0.014                                | 0.54      | 2.5                 | 0.25       | 5.4                  |
|              |            |           |             |                                    |             | 41.0            | 823.9875      | 0.011                                | 0.55      | 1.9                 | 0.26       | 4.1                  |
|              |            |           |             |                                    |             | 40.3            | 851.0125      | 0.005                                | 0.57      | 0.9                 | 0.26       | 1.9                  |
|              |            |           |             |                                    |             | 40.0            | 862.0125      | 0.007                                | 0.57      | 1.2                 | 0.27       | 2.5                  |
|              |            |           |             |                                    |             | 40.1            | 868.8875      | 0.003                                | 0.58      | 0.5                 | 0.27       | 1.2                  |
| Roof         | BS2        | E         | 2           | AN000131A01, 1/4 wave (136-870MHz) | 36.0        | 36.0            | 770.0125      | 0.027                                | 0.51      | 5.2                 | 0.25       | 10.9                 |
|              |            |           |             |                                    |             | 36.0            | 775.9125      | 0.033                                | 0.52      | 6.3                 | 0.25       | 13.3                 |
|              |            |           |             |                                    | 42.0        | 41.6            | 806.0125      | 0.011                                | 0.54      | 2.0                 | 0.25       | 4.2                  |
|              |            |           |             |                                    |             | 41.0            | 823.9875      | 0.010                                | 0.55      | 1.9                 | 0.26       | 4.0                  |
|              |            |           |             |                                    |             | 40.3            | 851.0125      | 0.005                                | 0.57      | 0.9                 | 0.26       | 1.9                  |
|              |            |           |             |                                    |             | 40.0            | 862.0125      | 0.004                                | 0.57      | 0.7                 | 0.27       | 1.5                  |
|              |            |           |             |                                    |             | 40.1            | 868.8875      | 0.002                                | 0.58      | 0.4                 | 0.27       | 0.9                  |
| Roof         | BS3        | E         | 2           | AN000131A01, 1/4 wave (136-870MHz) | 36.0        | 36.0            | 770.0125      | 0.015                                | 0.51      | 2.9                 | 0.25       | 6.1                  |
|              |            |           |             |                                    |             | 36.0            | 775.9125      | 0.021                                | 0.52      | 4.0                 | 0.25       | 8.3                  |
|              |            |           |             |                                    | 42.0        | 41.6            | 806.0125      | 0.008                                | 0.54      | 1.5                 | 0.25       | 3.1                  |
|              |            |           |             |                                    |             | 41.0            | 823.9875      | 0.006                                | 0.55      | 1.2                 | 0.26       | 2.5                  |
|              |            |           |             |                                    |             | 40.3            | 851.0125      | 0.003                                | 0.57      | 0.5                 | 0.26       | 1.1                  |
|              |            |           |             |                                    |             | 40.0            | 862.0125      | 0.003                                | 0.57      | 0.4                 | 0.27       | 1.0                  |
|              |            |           |             |                                    |             | 40.1            | 868.8875      | 0.001                                | 0.58      | 0.3                 | 0.27       | 0.6                  |

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

**Table H.1 (Continued)**

MPE assessment for Companion Mobile LMR 7/800- roof mounted antenna - Bystander

| Trunk /<br>Roof | Test<br>Post. | E/H<br>Field | Antenna<br>No. | Antenna<br>Model                         | Max Pwr<br>(W) | Initial Pwr<br>(W) | Tx Freq<br>(MHz) | Max Calc.<br>P.D.<br>(mW/cm <sup>2</sup> ) | FCC Limit | % To FCC<br>Spec Limit | ISED<br>Limit | % To ISED<br>Spec Limit |
|-----------------|---------------|--------------|----------------|------------------------------------------|----------------|--------------------|------------------|--------------------------------------------|-----------|------------------------|---------------|-------------------------|
| Roof            | BS4           | E            | 2              | AN000131A01,<br>1/4 wave<br>(136-870MHz) | 36.0           | 36.0               | 770.0125         | 0.007                                      | 0.51      | 1.3                    | 0.25          | 2.7                     |
|                 |               |              |                |                                          |                | 36.0               | 775.9125         | 0.010                                      | 0.52      | 2.0                    | 0.25          | 4.1                     |
|                 |               |              |                |                                          | 42.0           | 41.6               | 806.0125         | 0.011                                      | 0.54      | 2.0                    | 0.25          | 4.3                     |
|                 |               |              |                |                                          |                | 41.0               | 823.9875         | 0.014                                      | 0.55      | 2.6                    | 0.26          | 5.6                     |
|                 |               |              |                |                                          |                | 40.3               | 851.0125         | 0.012                                      | 0.57      | 2.1                    | 0.26          | 4.4                     |
|                 |               |              |                |                                          |                | 40.0               | 862.0125         | 0.011                                      | 0.57      | 2.0                    | 0.27          | 4.3                     |
|                 |               |              |                |                                          |                | 40.1               | 868.8875         | 0.007                                      | 0.58      | 1.2                    | 0.27          | 2.7                     |
|                 |               |              |                |                                          |                |                    |                  |                                            |           |                        |               |                         |
| Roof            | BS5           | E            | 2              | AN000131A01,<br>1/4 wave<br>(136-870MHz) | 36.0           | 36.0               | 770.0125         | 0.007                                      | 0.51      | 1.5                    | 0.25          | 3.0                     |
|                 |               |              |                |                                          |                | 36.0               | 775.9125         | 0.005                                      | 0.52      | 1.0                    | 0.25          | 2.0                     |
|                 |               |              |                |                                          | 42.0           | 41.6               | 806.0125         | 0.007                                      | 0.54      | 1.3                    | 0.25          | 2.7                     |
|                 |               |              |                |                                          |                | 41.0               | 823.9875         | 0.008                                      | 0.55      | 1.5                    | 0.26          | 3.3                     |
|                 |               |              |                |                                          |                | 40.3               | 851.0125         | 0.004                                      | 0.57      | 0.7                    | 0.26          | 1.5                     |
|                 |               |              |                |                                          |                | 40.0               | 862.0125         | 0.005                                      | 0.57      | 0.9                    | 0.27          | 2.0                     |
|                 |               |              |                |                                          |                | 40.1               | 868.8875         | 0.003                                      | 0.58      | 0.5                    | 0.27          | 1.1                     |
|                 |               |              |                |                                          |                |                    |                  |                                            |           |                        |               |                         |

**Table H.2**

MPE assessment for Companion Mobile LMR 7/800- roof 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 |
|--------------|------------|-----------|-------------|-------------------------------------|-------------|-----------------|---------------|--------------------------------------|-----------|---------------------|------------|----------------------|
| Roof         | PB         | E         | 2           | AN000131A01, 1/4 wave (136-870MHz)) | 36.0        | 36.0            | 770.0125      | 0.020                                | 0.51      | 3.8                 | 0.25       | 7.9                  |
|              |            |           |             |                                     |             | 36.0            | 775.9125      | 0.015                                | 0.52      | 2.9                 | 0.25       | 6.0                  |
|              |            |           |             |                                     | 42.0        | 41.6            | 806.0125      | 0.027                                | 0.54      | <b>5.0</b>          | 0.25       | <b>10.6</b>          |
|              |            |           |             |                                     |             | 41.0            | 823.9875      | 0.022                                | 0.55      | 4.1                 | 0.26       | 8.7                  |
|              |            |           |             |                                     |             | 40.3            | 851.0125      | 0.015                                | 0.57      | 2.7                 | 0.26       | 5.9                  |
|              |            |           |             |                                     |             | 40.0            | 862.0125      | 0.010                                | 0.57      | 1.7                 | 0.27       | 3.8                  |
|              |            |           |             |                                     |             | 40.1            | 868.8875      | 0.006                                | 0.58      | 1.0                 | 0.27       | 2.1                  |
| Roof         | PF         | E         | 2           | HAF4013A, 1/4 Wave (764-870MHz)     | 36.0        | 36.0            | 770.0125      | 0.002                                | 0.51      | 0.3                 | 0.25       | 0.6                  |
|              |            |           |             |                                     |             | 36.0            | 775.9125      | 0.002                                | 0.52      | 0.3                 | 0.25       | 0.7                  |
|              |            |           |             |                                     | 42.0        | 41.6            | 806.0125      | 0.005                                | 0.54      | 0.9                 | 0.25       | 1.9                  |
|              |            |           |             |                                     |             | 41.0            | 823.9875      | 0.008                                | 0.55      | 1.5                 | 0.26       | 3.3                  |
|              |            |           |             |                                     |             | 40.3            | 851.0125      | 0.006                                | 0.57      | 1.0                 | 0.26       | 2.2                  |
|              |            |           |             |                                     |             | 40.0            | 862.0125      | 0.004                                | 0.57      | 0.7                 | 0.27       | 1.5                  |
|              |            |           |             |                                     |             | 40.1            | 868.8875      | 0.005                                | 0.58      | 0.9                 | 0.27       | 1.9                  |

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

**Table H.3**  
**Companion Mobile LMR 7/800 MPE Results for FCC**

|                            |       |                                     |      |      |      |      |      |      |      |
|----------------------------|-------|-------------------------------------|------|------|------|------|------|------|------|
| <b>P<sub>max</sub> (W)</b> | 36/42 | <b>P<sub>initial</sub> (W)</b>      | 36.0 | 36.0 | 41.6 | 41.0 | 40.3 | 40.0 | 40.1 |
|                            |       | <b>FCCLimit (mW/cm<sup>2</sup>)</b> | 0.51 | 0.52 | 0.54 | 0.55 | 0.57 | 0.57 | 0.58 |

|       |            |       |              |           |             | f1       | f2       | f3       | f4       | f5       | f6       | f7       |
|-------|------------|-------|--------------|-----------|-------------|----------|----------|----------|----------|----------|----------|----------|
| Table | Test Post. | Angle | Trunk / Roof | E/H Field | Antenna No. | 770.0125 | 775.9125 | 806.0125 | 823.9875 | 851.0125 | 862.0125 | 868.8875 |
| H.1   | BS1        |       | Roof         | E         | 2           | 0.033    | 0.026    | 0.014    | 0.011    | 0.005    | 0.007    | 0.003    |
| H.1   | BS2        |       | Roof         | E         | 2           | 0.027    | 0.033    | 0.011    | 0.010    | 0.005    | 0.004    | 0.002    |
| H.1   | BS3        |       | Roof         | E         | 2           | 0.015    | 0.021    | 0.008    | 0.006    | 0.003    | 0.003    | 0.001    |
| H.1   | BS4        |       | Roof         | E         | 2           | 0.007    | 0.010    | 0.011    | 0.014    | 0.012    | 0.011    | 0.007    |
| H.1   | BS5        |       | Roof         | E         | 2           | 0.007    | 0.005    | 0.007    | 0.008    | 0.004    | 0.005    | 0.003    |
|       |            |       |              |           | 2           |          |          |          |          |          |          |          |
| H.2   | BS2        |       | Roof         | E         | 2           | 0.020    | 0.015    | 0.027    | 0.022    | 0.015    | 0.010    | 0.006    |
| H.2   | BS2        |       | Roof         | E         | 2           | 0.002    | 0.002    | 0.005    | 0.008    | 0.006    | 0.004    | 0.005    |