



**COMPUTATIONAL EME COMPLIANCE ASSESSMENT OF THE APX SERIES  
MODEL M25URS9PW1BN (PMUF1969A) MOBILE RADIO AND COMPANION  
DEVICE, DIGITAL VEHICULAR REPEATER (DVR VHF), MOBEXCOM DVRS VHF  
(DQPMDVR3000P)**

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**Introduction**

This report summarizes the computational [numerical modeling] analysis performed to document compliance of the APX Series Model Number M25URS9PW1BN (PMUF1969A) Mobile Radio interfaced with, and transmitting simultaneously with DVR VHF, model # MOBEXCOM DVRS VHF (DQPMDVR3000P) and vehicle-mounted antennas with the US Federal Communications Commission (FCC) and Innovation, Science and Economic Development (ISED) Canada guidelines for human exposure to radio frequency (RF) emissions. The devices operate in the following frequency bands:

<b>Regions</b>	<b>Device</b>	<b>Bands</b>	<b>Frequency Band (MHz)</b>
FCC US	Mobile APX6500	7/800 MHz	769-775; 799-824; 851-869
	DVR	VHF	150.8-173.4
ISED Canada	Mobile APX6500	7/800 MHz	769-775; 799-824; 851-869
	DVR	VHF	138-174

This computational analysis supplements the measurements conducted to evaluate the compliance of the exposure from this mobile radio and companion device DVR VHF with respect to applicable *reference levels* [1] [2], which in the following will be referred to as

*maximum permissible exposure* (MPE) limits.<sup>1</sup> A total 324 test conditions that did not conform with applicable MPE limits were considered to determine whether those conditions complied with the *specific absorption rate* (SAR) limits for general public exposure (1.6 W/kg averaged over 1 gram of tissue and 0.08 W/kg averaged over the whole body) set forth in FCC and Health Canada guidelines [1] [2].

Employing SAR simulation reduction considerations<sup>2</sup>, a total of 9 configurations (with requiring a total of 18 numerical simulations) have been performed, all of them addressing the exposure of the back seat passenger to the DVR VHF repeater featuring trunk-mount antennas and the APX6500 mobile radio featuring roof-mount antennas.

For all simulations a commercial code (XFDTD™ v7.6.0, by Remcom Inc, State College, PA, USA) based on the Finite-Difference-Time-Domain (FDTD) methodology was employed to carry out the computational analysis. It is well established and recognized within the scientific community that SAR represents the basic restriction for RF energy exposure up to 6 GHz and that MPE limits are in fact derived from SAR limits. Accordingly, the SAR computations provide a scientifically valid and more relevant estimate of RF energy exposures.

## Method

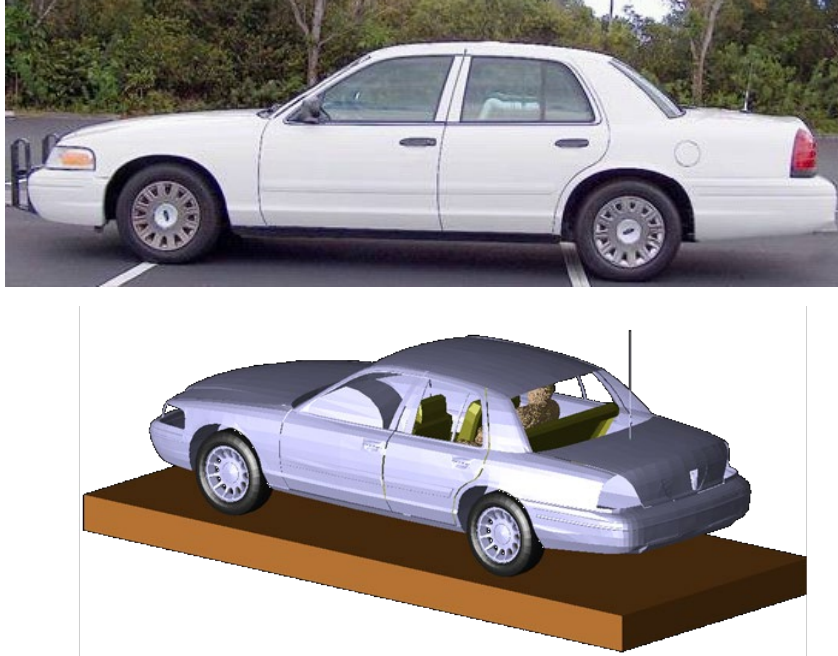
The XFDTD™ v7.6.0 computational suite enable simulating the heterogeneous full human body model defined according to the IEC/IEEE 62704-2:2017 standard and derived from the so-called Visible Human [3], discretized in 3 mm cubic-edge voxels. The IEC/IEEE 62704-2:2017 dielectric properties for 39 body tissues are automatically assigned by XFDTD™ at the specific simulation frequency. The “seated” man model representing the passenger was obtained from the standing model by modifying the articulation angles at the hips and the knees. Details of the computational method and model are provided in the Appendix A to this report. The evaluation of the computational uncertainties and results of the benchmark validations are provided in the Appendix B attached to this report. The XFDTD code validation performed by Remcom Inc. according to the IEEE/IEC 62704-2:2017 standard requirements are provided in conjunction with this report.

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<sup>1</sup> This choice is made for process efficiency, since “MPE” is used in the United States. In this way, chances of making editorial mistakes that may then require extended interactions with the report examiner are reduced.

<sup>2</sup> SAR simulation reduction is described in the SAR Simulations Reduction Considerations section of this report.

The car model has been imported into XFDTD™ from the CAD file of the sedan vehicle defined in the IEEE/IEC 62704-2:2017 standard, having dimensions 4.98 m (L) x 1.85 m (W) x 1.18 m (H), and discretized with the minimum resolution of 3 mm and the maximum resolution of 8 mm. Figure 1 below shows both the vehicle CAD model and a picture of the actual vehicle.

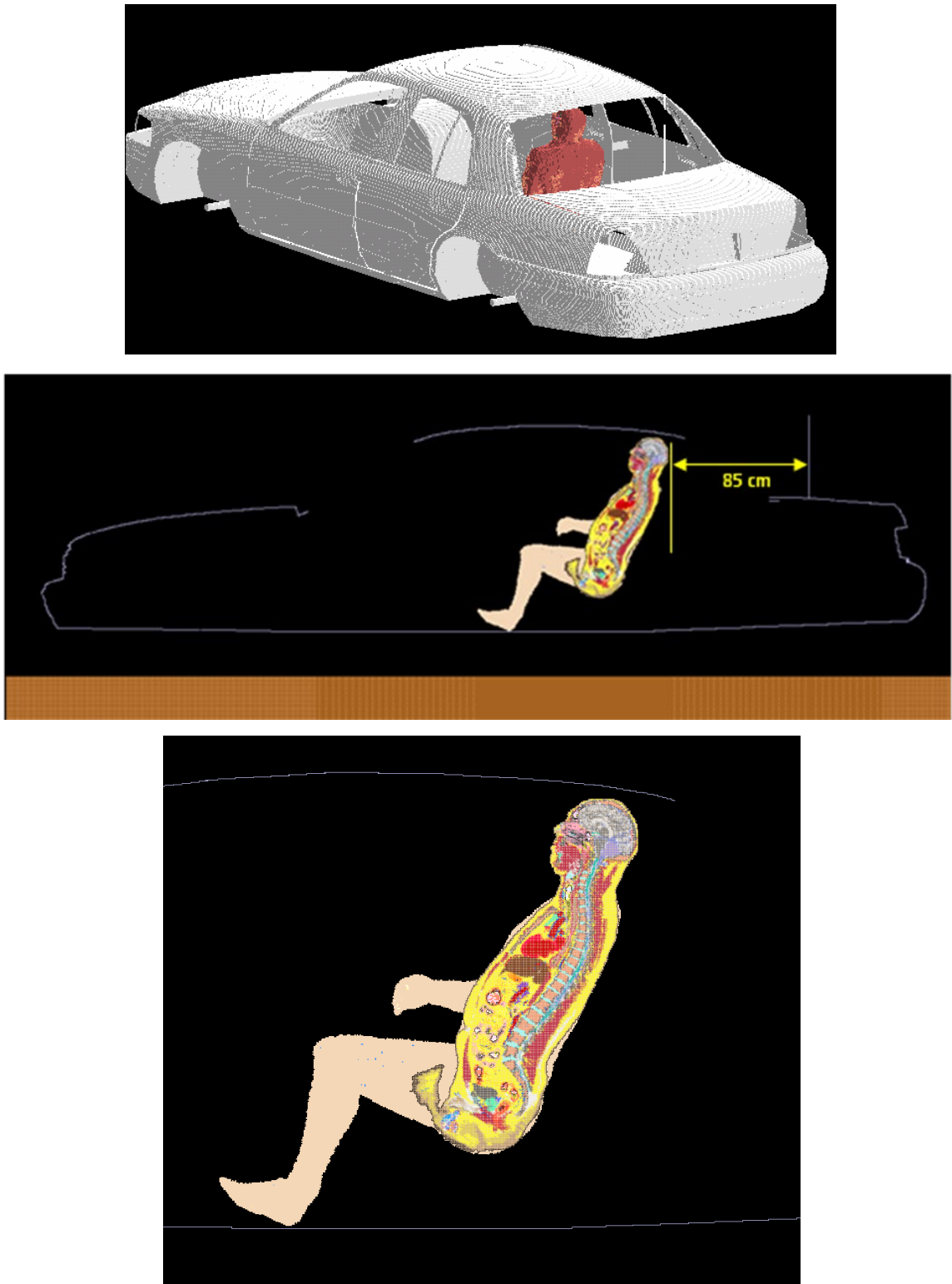


**Figure 1: Picture of the vehicle and corresponding CAD model used in XFDTD™ simulations**

For back seat passenger exposures, the antenna is positioned on the trunk at 85 cm distance from the passenger model head when the passenger model is located in the center of the back seat, replicating the experimental conditions used in MPE measurements. Figure 2 shows the XFDTD™ computational models used for passenger exposure to trunk mounted antennas.

According to the IEC/IEEE 62704-2:2017 standard a lossy dielectric slab featuring 30 cm thickness, relative dielectric constant 8 and conductivity 0.01 S/m has been introduced in the computational model to properly account for the effect of the ground (pavement) on exposure.

The computational code employs a time-harmonic field excitation to produce a steady-state electromagnetic field in the exposed body model. Subsequently, the corresponding SAR distribution is automatically processed in order to determine the whole-body SAR and peak spatial average SAR distribution.



**Figure 2: Passenger (back seat) model exposed to a trunk-mount antenna: XFDTD™ geometry.  
The antenna is installed at 85 cm from the passenger located in the center of the back seat.**

The maximum average output power from mobile radio antenna is 36W (762-805 MHz) and 42W (806-870 MHz), while it is 6 W from the DVR VHF repeater antenna (136-174 MHz). Since the ohmic losses in the vehicle materials, as well as the mismatch losses at the antenna feed-point are neglected, while source-based time averaging (50% talk time for push-to-talk operation) for the APX6500 mobile radio and (100% talk time) for DVR VHF were employed, all computational results are normalized to half of the APX6500 mobile radio maximum average net output power, i.e., 18W (762-805 MHz) and 21W (806-870 MHz) and to full average net output power of the companion DVR VHF repeater, i.e., 6W (136-174 MHz); minus the corresponding minimum insertion loss in excess of 0.5 dB of the feed cables supplied with the antennas, in accordance with the IEC/IEEE 62704-2:2017 standard provisions.

### **Results of SAR computations for car passengers**

The test conditions requiring SAR computations are summarized in Table 1 (APX6500 mobile radio, 50% talk time) and Table 2 (DVR VHF, 100% talk time), together with the antenna data, the SAR results, and power density (P.D.) as obtained from the MPE measurements in the corresponding test conditions. The conditions are for antennas mounted on the center of the roof (APX6500 mobile radio) and the center of the trunk (DVR VHF). The antenna length listed in the tables includes the height of the 1.8 cm magnetic mount base used in MPE measurements to position the antenna on the vehicle. The same length was then used in the corresponding simulation model.

The passenger is located in the center or on the side of the rear seat corresponding to the respective configurations defined in the IEC/IEEE 62704-2-2017 standard.

All the transmit frequency, antenna length, and passenger location combinations reported in Tables 1 and 2 have been simulated individually. These tables also include the interpolated adjustment factor and corresponding scaled SAR values following the requirements of the IEC/IEEE 62704-2:2017 standard.

**Table 1a: Computed and adjusted SAR results for back seat passenger exposure for APX6500 mobile radio**  
(Configurations exceeding FCC MPE limits)

Mount Location	Antenna Kit#	Antenna Length (cm)	Freq (MHz)	P.D. (mW/cm <sup>2</sup> )	Exposure Location	Computed SAR (W/kg)		Interpolated Adjustment Factors		Adjusted SAR Results (W/kg)	
						1 g	WB	1 g	WB	1 g	WB
Roof	HAF4013A, 1/4 Wave, (762-870MHz)	7.9	774.9875	0.02	Back Center	0.01	0.001	2.69	2.64	0.04	0.002
					Back Side	0.02	0.001	1.61	2.16	0.03	0.002
Roof	HAF4014A, (762-870MHz)	59.5	823.9875	0.01	Back Center	0.02	0.001	2.64	2.71	0.04	0.002
					Back Side	0.03	0.001	1.58	2.14	0.05	0.001
Roof	HAF4016A, 1/4 Wave, (762-870MHz)	10.8	769.0125	0.02	Back Center	0.02	0.001	2.69	2.62	0.04	0.002
					Back Side	0.03	0.001	1.61	2.17	0.05	0.002
Roof	HAF4017A, (762-870MHz)	36.3	772.0000	0.03	Back Center	0.03	0.001	2.69	2.63	0.08	0.003
					Back Side Fig. 3 & 4	0.05	0.002	1.61	2.16	<b>0.08</b>	<b>0.004</b>

Note:  
**Blue** – the highest adjusted SAR results for the respective frequency band.

**Table 1b: Computed and adjusted SAR results for back seat passenger exposure for APX6500 mobile radio**  
(Configurations exceeding ISED MPE limits)

Mount Location	Antenna Kit#	Antenna Length (cm)	Freq (MHz)	P.D. (mW/cm <sup>2</sup> )	Exposure Location	Computed SAR (W/kg)		Interpolated Adjustment Factors		Adjusted SAR Results (W/kg)	
						1 g	WB	1 g	WB	1 g	WB
Roof	HAF4013A, 1/4 Wave, (762-870MHz)	7.9	#774.9875	0.02	Back Center	0.01	0.001	2.69	2.63	0.04	0.002
					Back Side	0.02	0.001	1.61	2.16	0.03	0.002
Roof	HAF4014A, (762-870MHz)	59.5	#823.9875	0.01	Back Center	0.02	0.001	2.64	2.71	0.04	0.002
					Back Side	0.03	0.001	1.58	2.14	0.05	0.001
Roof	HAF4016A, 1/4 Wave, (762-870MHz)	10.8	#769.0125	0.02	Back Center	0.02	0.001	2.69	2.62	0.04	0.002
					Back Side	0.03	0.001	1.61	2.17	0.05	0.002
Roof	HAF4017A, (762-870MHz)	36.3	774.9875	0.03	Back Center	0.03	0.001	2.69	2.64	0.07	0.003
					Back Side Fig. 5 & 6	0.04	0.002	1.61	2.16	<b>0.07</b>	<b>0.003</b>

Note:  
**Blue** – the highest adjusted SAR results for the respective frequency band.  
Note: # Same SAR simulation configuration as FCC US.

**Table 2a: Computed and adjusted SAR results for back seat passenger exposure for  
DVR VHF**

(Configurations exceeding FCC MPE limits)

Mount Location	Antenna Kit#	Antenna Length (cm)	Freq (MHz)	P.D. (mW/cm <sup>2</sup> )	Exposure Location	Computed SAR (W/kg)		Interpolated Adjustment Factors		Adjusted SAR Results (W/kg)	
						1 g	WB	1 g	WB	1 g	WB
Trunk	HAD4008A, 1/4 Wave (150.8-162MHz)	47.3	162.0000	0.23	Back Center	0.16	0.007	1.92	2.42	0.31	0.018
					Back Side Fig. 7 & 8	0.16	0.006	4.11	2.98	<b>0.67</b>	<b>0.019</b>

Note:  
**Blue** – the highest adjusted SAR results for the respective frequency band.

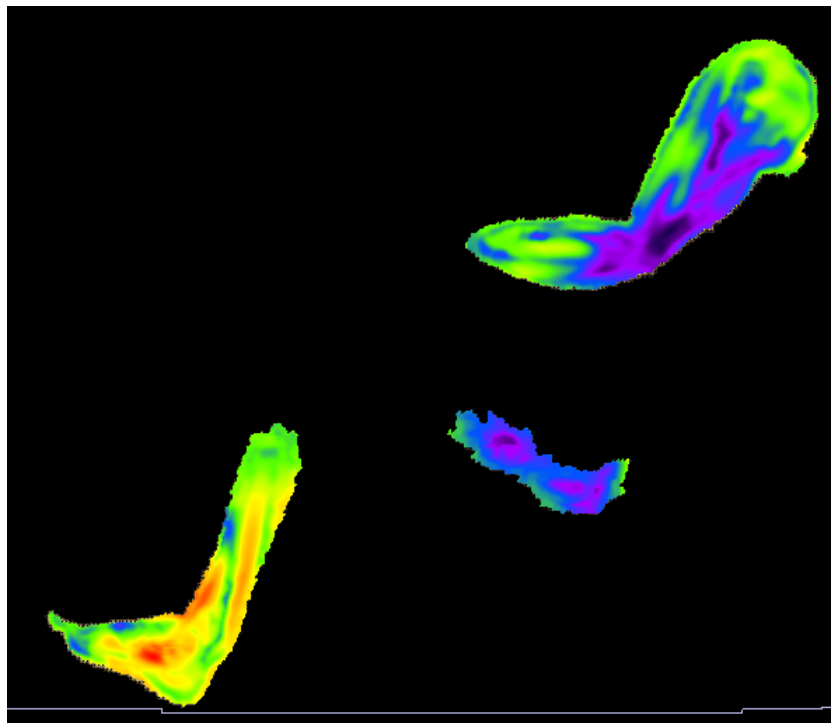
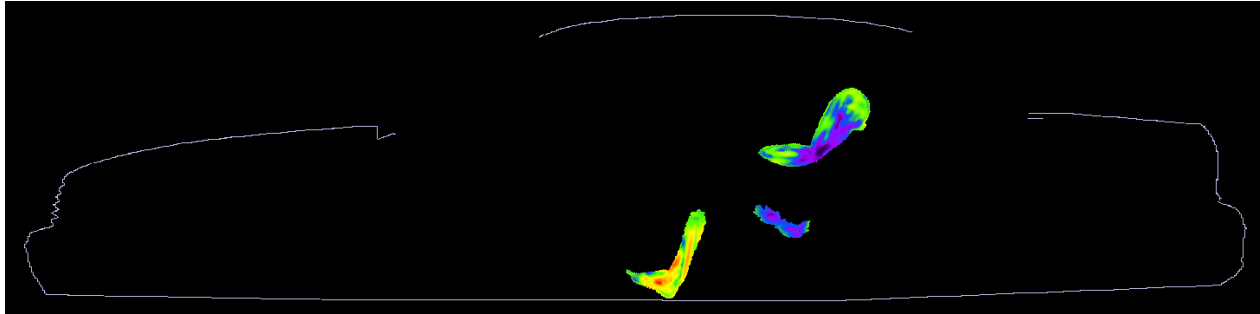
**Table 2b: Computed and adjusted SAR results for back seat passenger exposure for  
DVR VHF**

(Configurations exceeding ISED MPE limits)

Mount Location	Antenna Kit#	Antenna Length (cm)	Freq (MHz)	P.D. (mW/cm <sup>2</sup> )	Exposure Location	Computed SAR (W/kg)		Interpolated Adjustment Factors		Adjusted SAR Results (W/kg)	
						1 g	WB	1 g	WB	1 g	WB
Trunk	HAD4006A, 1/4 Wave (136-144MHz)	53.8	140.0000	0.20	Back Center	0.07	0.003	1.77	2.26	0.12	0.007
					Back Side	0.05	0.003	3.74	2.71	0.20	0.008
Trunk	HAD4007A, 1/4 Wave (144-150.8MHz)	50.8	144.0000	0.15	Back Center	0.18	0.008	1.82	2.31	0.34	0.018
					Back Side	0.07	0.005	3.93	2.83	0.27	0.014
Trunk	HAD4008A, 1/4 Wave (150.8-162MHz)	47.3	#162.0000	0.23	Back Center	0.16	0.007	1.92	2.42	0.31	0.018
					Back Side	0.16	0.006	4.11	2.98	<b>0.67</b>	<b>0.019</b>
Trunk	HAD4009A, 1/4 Wave (162-174MHz)	44.8	173.4000	0.19	Back Center	0.10	0.005	1.94	2.43	0.19	0.013
					Back Side	0.13	0.005	4.03	2.97	0.52	0.015

Note:  
**Blue** – the highest adjusted SAR results for the respective frequency band.  
Note: # Same SAR simulation configuration as FCC US.

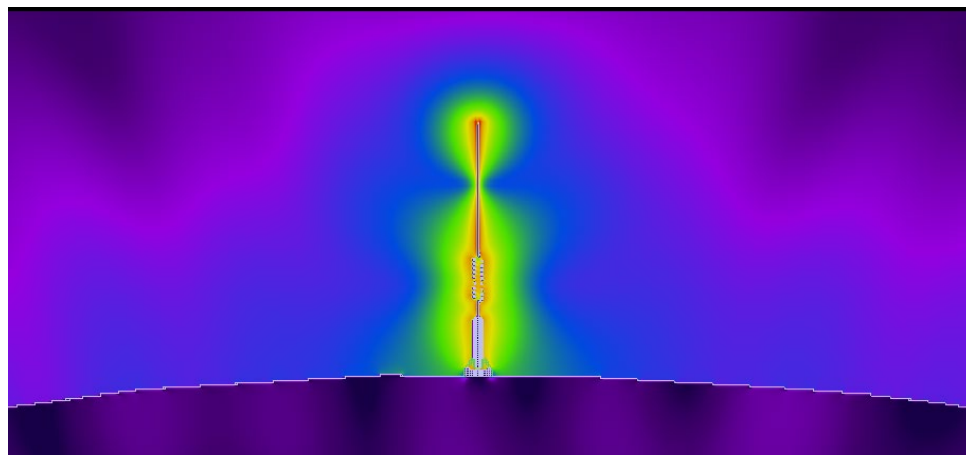
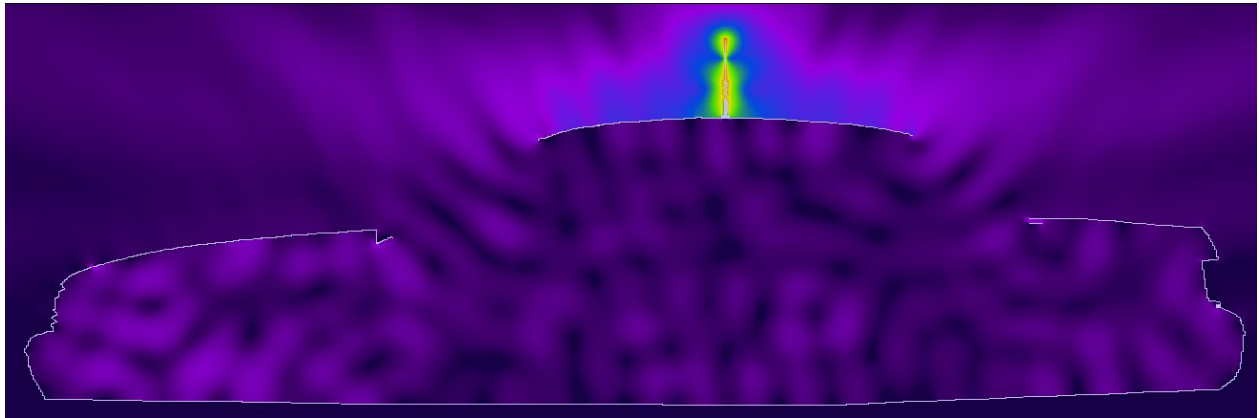
The SAR distribution in the passenger exposure condition that gave highest adjusted 1-g SAR for the APX6500 mobile radio (FCC US) is reported in Figure 3. (772.0000 MHz, passenger on the side of the back seat, HAF4017A antenna installed on the roof).



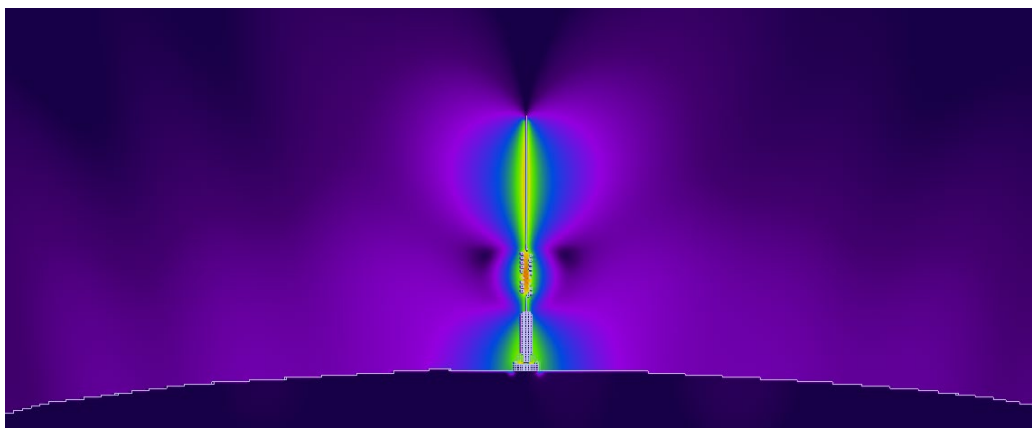
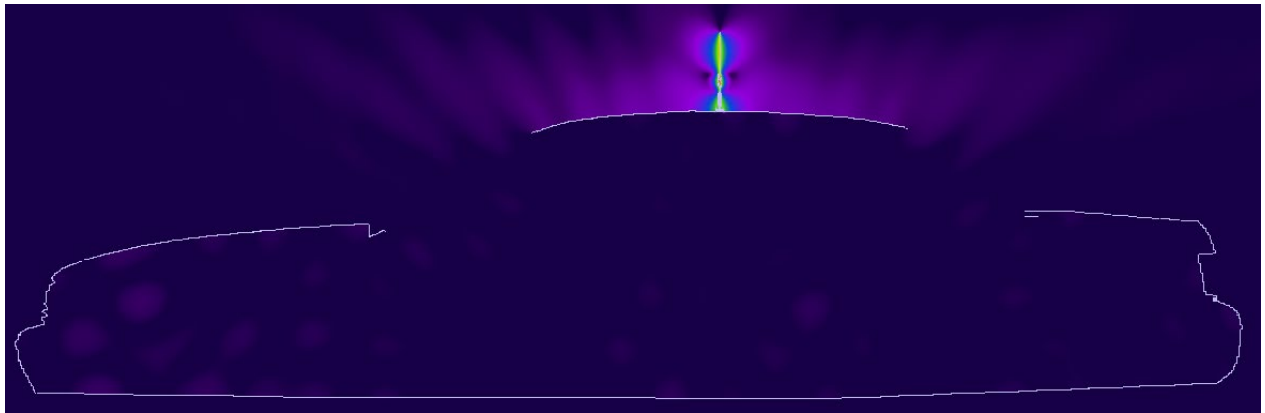
**Figure 3. SAR distribution at 772.0000 MHz in the passenger model located on the side of the back seat, produced by the roof-mount HAF4017A antenna. The SAR distribution plot is relative to the plane where the peak 1-g average SAR for this exposure condition occurs.**



The plots in Figure 4 illustrate the E and H field distributions in the plane of the antenna corresponding to the exposure condition resulting in the SAR distribution in Figure 3.



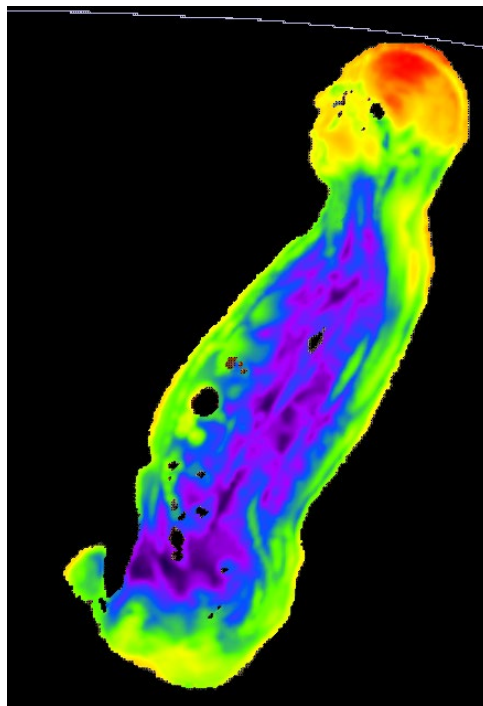
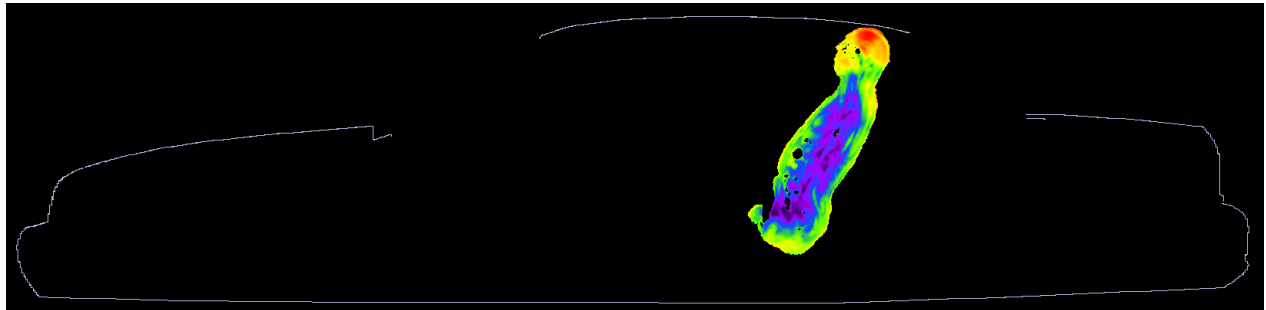
a)



b)

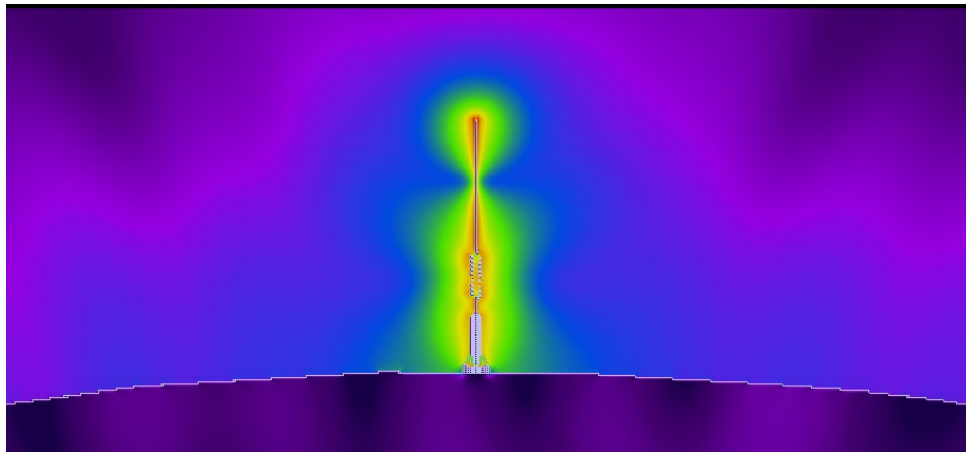
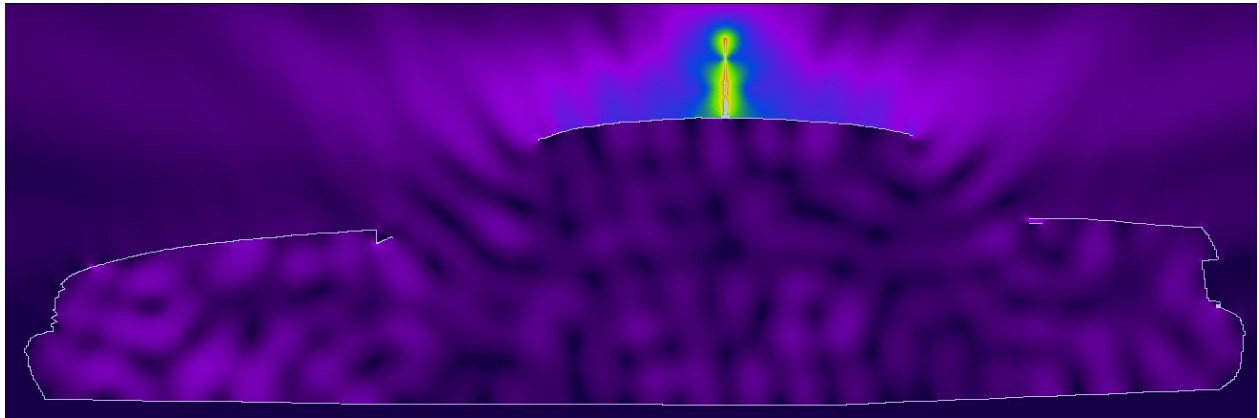
**Figure 4. (a) E-field magnitude distribution corresponding to exposure condition of Figure 3, and (b) H-field magnitude distribution corresponding to exposure condition of Figure 3.**

The SAR distribution in the passenger exposure condition that gave highest adjusted 1-g SAR for the APX6500 mobile radio (ISED Canada) is reported in Figure 5. (774.9875 MHz, passenger on the side of the back seat, HAF4017A antenna installed on the roof).

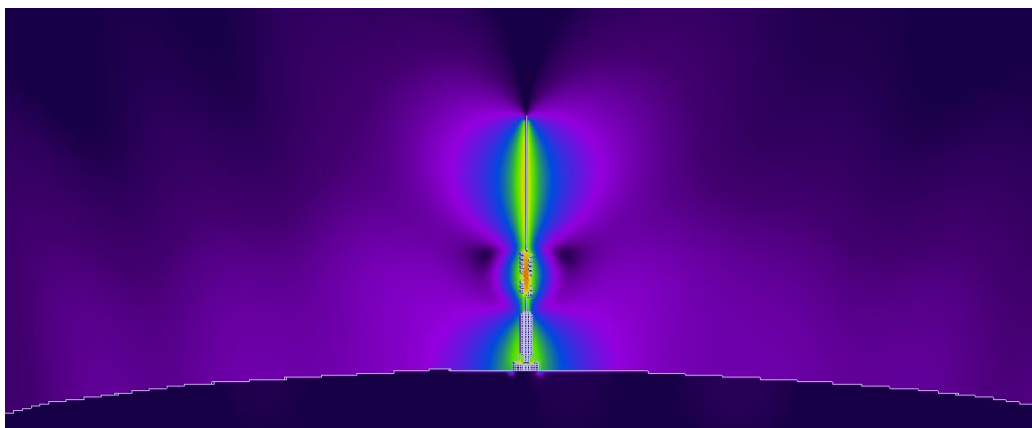
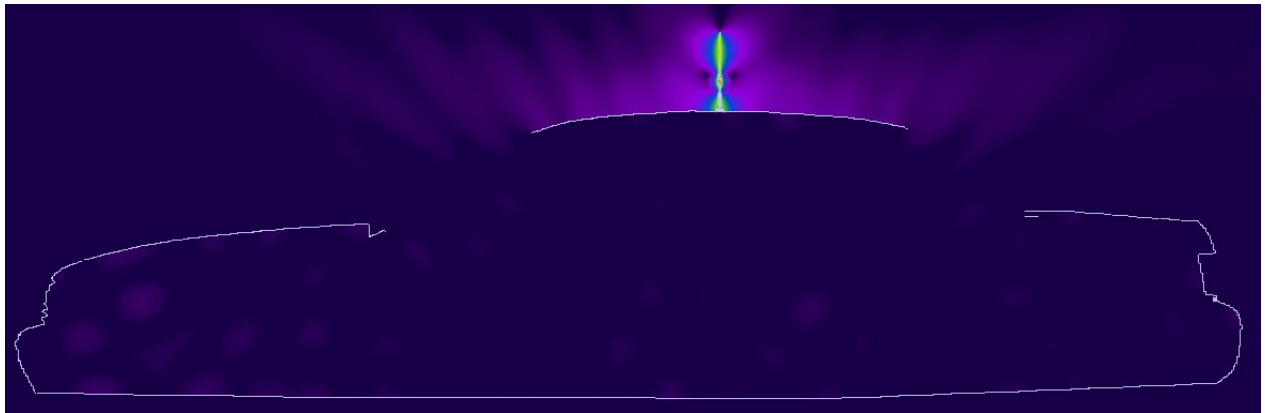


**Figure 5. SAR distribution at 774.9875 MHz in the passenger model located on the side of the back seat, produced by the roof-mount HAF4017A antenna. The SAR distribution plot is relative to the plane where the peak 1-g average SAR for this exposure condition occurs.**

The plots in Figure 6 illustrate the E and H field distributions in the plane of the antenna corresponding to the exposure condition resulting in the SAR distribution in Figure 5.



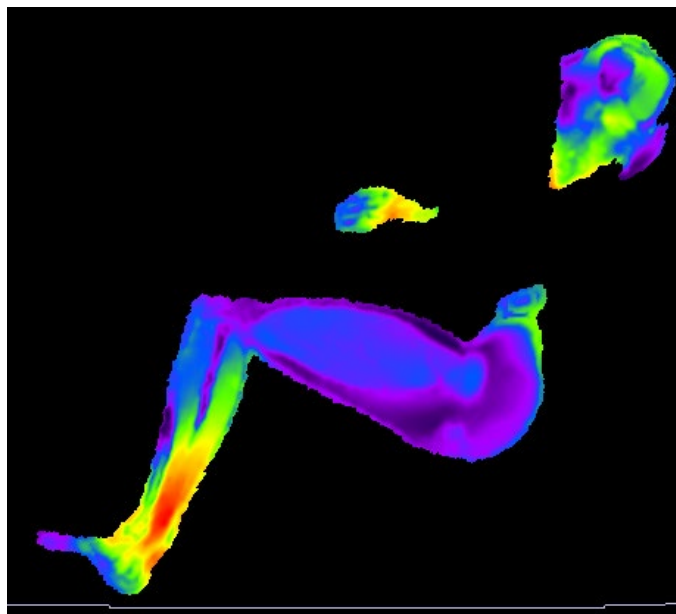
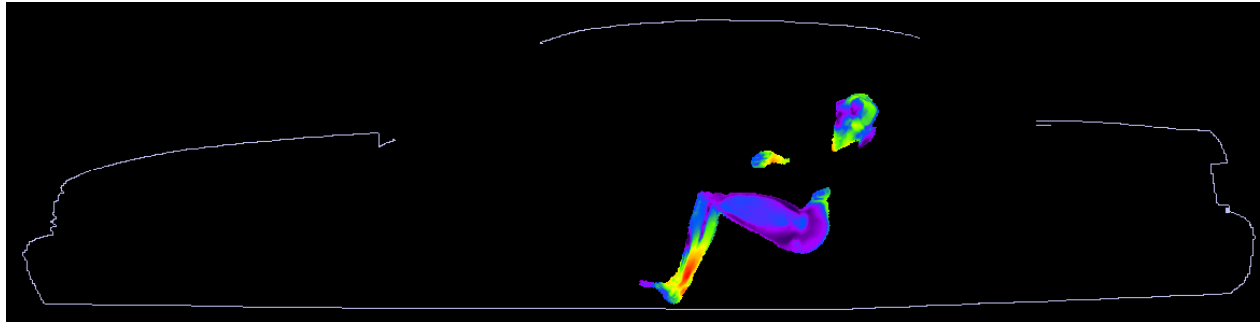
a)



b)

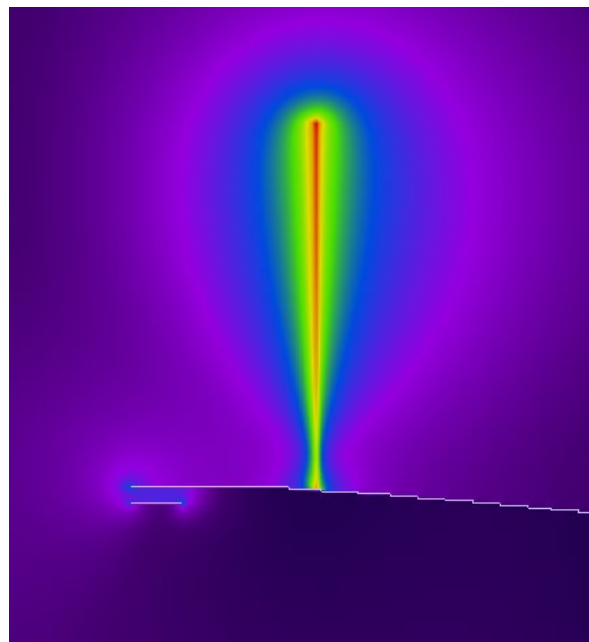
**Figure 6. (a) E-field magnitude distribution corresponding to exposure condition of Figure 5, and (b) H-field magnitude distribution corresponding to exposure condition of Figure 5.**

The SAR distribution in the passenger exposure condition that produced the highest adjusted 1-g SAR for the DVR VHF (FCC US and ISED Canada) is reported in Figure 7. (162.0000 MHz, passenger on the side of the back seat, HAD4008A antenna installed on the trunk).

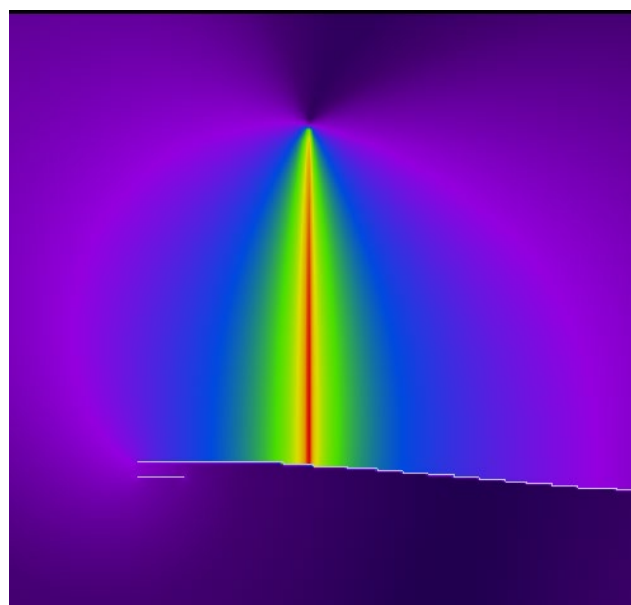
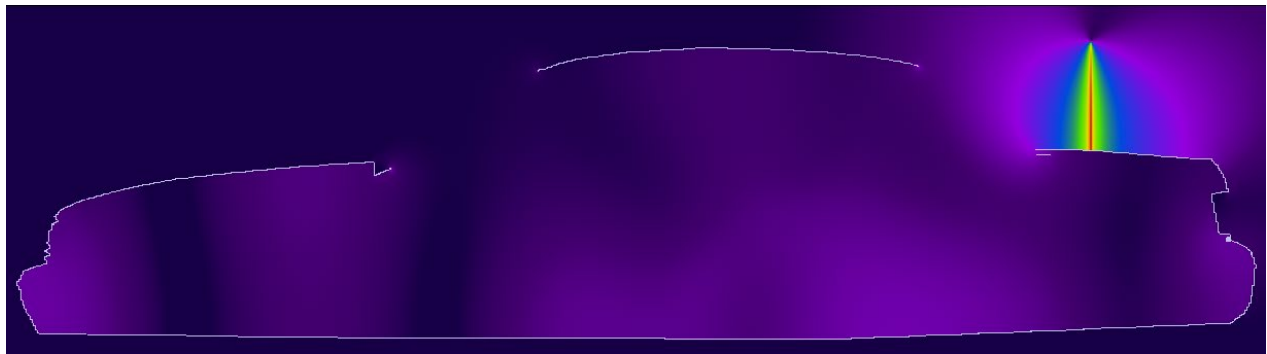


**Figure 7. SAR distribution at 162.0000 MHz in the passenger model located on the side of the back seat, produced by the trunk-mount HAD4008A antenna. The SAR distribution plot is relative to the plane where the peak 1-g average SAR for this exposure condition occurs.**

The plots in Figure 8 illustrate the E and H field distributions in the plane of the antenna corresponding to the exposure condition resulting in the SAR distribution in Figure 7.



a)



b)

**Figure 8. (a) E-field magnitude distribution corresponding to exposure condition of Figure 7, and (b) H-field magnitude distribution corresponding to exposure condition of Figure 7.**



**SAR Simulation Reduction Considerations**

Per the Response to Inquiry to FCC Tracking Number 528198, for a particular antenna that has more than one configuration which exceeds the MPE limit, SAR evaluations shall begin with the highest MPE configuration (mount location and frequency channel). If the SAR value is less than 50% of the SAR limit, no further SAR evaluation is needed for that antenna.

If the highest MPE configuration SAR value is above 50% of the SAR limit, a subsequent SAR simulation shall be performed on the subsequent highest MPE configuration (ranked in descending percentage of the MPE limit). If the subsequent adjusted SAR value is below 75% of the limit, no further SAR evaluation is needed for that antenna, otherwise further SAR simulations for the remaining antenna configurations shall continue until the adjusted SAR value is below 75% of the SAR limit.

Table 3 and 4 below lists all the configurations that did not conform to applicable MPE limits (ranked in descending percentage of the MPE limit), to which the aforementioned SAR simulation reduction considerations were applied.

**Table 3: SAR Simulation Reduction Considerations for Back Seat Passenger  
(FCC US)**

APX 6500 7/800 Band		DVR VHF		Combine MPE (%)	Exposure Location	APX 6500 7/800 Band		DVR VHF Adjusted SAR Results (W/kg)		Combine Adjusted SAR Results (W/kg)		SAR Simulation Reduction
Antenna Kit#	Freq (MHz)	Antenna Kit#	Freq (MHz)			1g	WB	1g	WB	1g	WB	
HAF4013A	774.9875	HAD4008A	162.0000	120.17	Back Center Back Side	0.04 0.03	0.002 0.002	0.31 0.67	0.018 0.019	0.35 0.70	0.020 0.021	The highest MPE configuration has SAR below 50% of the limit.
HAF4013A	772.0000	HAD4008A	162.0000	120.07								
HAF4013A	769.0125	HAD4008A	162.0000	119.77								
HAF4013A	799.0125	HAD4008A	162.0000	119.47								
HAF4013A	823.9875	HAD4008A	162.0000	119.47								
HAF4013A	811.5000	HAD4008A	162.0000	119.07								
HAF4013A	860.5000	HAD4008A	162.0000	118.37								
HAF4013A	869.9875	HAD4008A	162.0000	117.97								
HAF4013A	851.0125	HAD4008A	162.0000	117.77								
HAF4014A	823.9875	HAD4008A	162.0000	118.87	Back Center Back Side	0.04 0.05	0.002 0.001	0.31 0.67	0.018 0.019	0.35 0.72	0.020 0.020	The highest MPE configuration has SAR below 50% of the limit.
HAF4014A	811.5000	HAD4008A	162.0000	118.47								
HAF4014A	851.0125	HAD4008A	162.0000	118.47								
HAF4014A	868.9875	HAD4008A	162.0000	118.37								
HAF4014A	860.5000	HAD4008A	162.0000	117.87								
HAF4014A	799.0125	HAD4008A	162.0000	117.57								
HAF4014A	769.0125	HAD4008A	162.0000	116.87								
HAF4014A	772.0000	HAD4008A	162.0000	116.87								
HAF4014A	774.9875	HAD4008A	162.0000	116.77								
HAF4016A	769.0125	HAD4008A	162.0000	120.07	Back Center Back Side	0.04 0.05	0.002 0.002	0.31 0.67	0.018 0.019	0.35 0.72	0.020 0.021	The highest MPE configuration has SAR below 50% of the limit.
HAF4016A	823.9875	HAD4008A	162.0000	119.97								
HAF4016A	772.0000	HAD4008A	162.0000	119.87								
HAF4016A	774.9875	HAD4008A	162.0000	119.87								
HAF4016A	799.0125	HAD4008A	162.0000	119.47								
HAF4016A	811.5000	HAD4008A	162.0000	118.77								
HAF4016A	851.0125	HAD4008A	162.0000	118.17								
HAF4016A	868.9875	HAD4008A	162.0000	118.17								
HAF4016A	860.5000	HAD4008A	162.0000	118.07								

**Table 3 continued: SAR Simulation Reduction Considerations for Back Seat Passenger  
(FCC US)**

APX 6500 7/800 Band		DVR VHF		Combine MPE (%)	Exposure Location	APX 6500 7/800 Band		DVR VHF Adjusted SAR Results (W/kg)		Combine Adjusted SAR Results (W/kg)		SAR Simulation Reduction
Antenna Kit#	Freq (MHz)	Antenna Kit#	Freq (MHz)			Ig	WB	Ig	WB	Ig	WB	
HAF4017A	772.0000	HAD4008A	162.0000	122.07	Back Center Back Side	0.08 0.08	0.003 0.004	0.31 0.67	0.018 0.019	0.39 0.75	0.021 0.023	The highest MPE configuration has SAR below 50% of the limit.
HAF4017A	774.9875	HAD4008A	162.0000	122.07								
HAF4017A	769.0125	HAD4008A	162.0000	121.77								
HAF4017A	799.0125	HAD4008A	162.0000	121.57								
HAF4017A	823.9875	HAD4008A	162.0000	120.47								
HAF4017A	811.5000	HAD4008A	162.0000	120.37								
HAF4017A	860.5000	HAD4008A	162.0000	119.87								
HAF4017A	851.0125	HAD4008A	162.0000	118.67								
HAF4017A	868.9875	HAD4008A	162.0000	118.57								

**Table 4: SAR Simulation Reduction Considerations for Back Seat Passenger  
(ISED Canada)**

APX 6500 7/800 Band		DVR VHF		Combine MPE (%)	Exposure Location	APX 6500 7/800 Band		DVR VHF Adjusted SAR Results (W/kg)		Combine Adjusted SAR Results (W/kg)		SAR Simulation Reduction
Antenna Kit#	Freq (MHz)	Antenna Kit#	Freq (MHz)			Ig	WB	Ig	WB	Ig	WB	
HAF4013A	774.9875	HAD4006A	140.0000	162.20	Back Center Back Side	0.04 0.03	0.002 0.002	0.12 0.20	0.007 0.008	0.16 0.23	0.009 0.010	The highest MPE configuration has SAR below 50% of the limit.
HAF4013A	772.0000	HAD4006A	140.0000	162.20								
HAF4013A	769.0125	HAD4006A	140.0000	161.40								
HAF4013A	799.0125	HAD4006A	140.0000	161.00								
HAF4013A	823.9875	HAD4006A	140.0000	160.90								
HAF4013A	811.5000	HAD4006A	140.0000	160.00								
HAF4013A	860.5000	HAD4006A	140.0000	158.70								
HAF4013A	868.9875	HAD4006A	140.0000	157.90								
HAF4013A	851.0125	HAD4006A	140.0000	157.50								
HAF4013A	772.0000	HAD4006A	144.0000	140.50								
HAF4013A	774.9875	HAD4006A	144.0000	140.50								
HAF4013A	769.0125	HAD4006A	144.0000	139.70								
HAF4013A	799.0125	HAD4006A	144.0000	139.30								
HAF4013A	823.9875	HAD4006A	144.0000	139.20								
HAF4013A	811.5000	HAD4006A	144.0000	138.30								
HAF4013A	860.5000	HAD4006A	144.0000	137.00								
HAF4013A	868.9875	HAD4006A	144.0000	136.20								
HAF4013A	851.0125	HAD4006A	144.0000	135.80								
HAF4014A	823.9875	HAD4006A	140.0000	159.80	Back Center Back Side	0.04 0.05	0.002 0.001	0.12 0.20	0.007 0.008	0.16 0.25	0.009 0.009	The highest MPE configuration has SAR below 50% of the limit.
HAF4014A	811.5000	HAD4006A	140.0000	158.90								
HAF4014A	851.0125	HAD4006A	140.0000	158.80								
HAF4014A	868.9875	HAD4006A	140.0000	158.80								
HAF4014A	860.5000	HAD4006A	140.0000	157.60								
HAF4014A	799.0125	HAD4006A	140.0000	157.00								
HAF4014A	769.0125	HAD4006A	140.0000	155.40								
HAF4014A	772.0000	HAD4006A	140.0000	155.40								
HAF4014A	774.9875	HAD4006A	140.0000	155.30								
HAF4014A	823.9875	HAD4006A	144.0000	138.10								
HAF4014A	811.5000	HAD4006A	144.0000	137.20								
HAF4014A	851.0125	HAD4006A	144.0000	137.10								
HAF4014A	868.9875	HAD4006A	144.0000	137.10								
HAF4014A	860.5000	HAD4006A	144.0000	135.90								
HAF4014A	799.0125	HAD4006A	144.0000	135.30								
HAF4014A	769.0125	HAD4006A	144.0000	133.70								
HAF4014A	772.0000	HAD4006A	144.0000	133.70								
HAF4014A	774.9875	HAD4006A	144.0000	133.60								

**Table 4 continued: SAR Simulation Reduction Considerations for Back Seat Passenger  
(ISED Canada)**

APX 6500 7/800 Band		DVR VHF		Combine MPE (%)	Exposure Location	APX 6500 7/800 Band		DVR VHF Adjusted SAR Results (W/kg)		Combine Adjusted SAR Results (W/kg)		SAR Simulation Reduction																
Antenna Kit#	Freq (MHz)	Antenna Kit#	Freq (MHz)			1g	WB	1g	WB	1g	WB																	
HAF4016A	769.0125	HAD4006A	140.0000	162.10	Back Center Back Side	0.04 0.05	0.002 0.002	0.12 0.20	0.007 0.008	0.16 0.25	0.009 0.010	The highest MPE configuration has SAR below 50% of the limit.																
HAF4016A	823.9875	HAD4006A	140.0000	162.00									The highest MPE configuration has SAR below 50% of the limit.															
HAF4016A	772.0000	HAD4006A	140.0000	161.60										The highest MPE configuration has SAR below 50% of the limit.														
HAF4016A	774.9875	HAD4006A	140.0000	161.60											The highest MPE configuration has SAR below 50% of the limit.													
HAF4016A	799.0125	HAD4006A	140.0000	161.00												The highest MPE configuration has SAR below 50% of the limit.												
HAF4016A	811.5000	HAD4006A	140.0000	159.40													The highest MPE configuration has SAR below 50% of the limit.											
HAF4016A	851.0125	HAD4006A	140.0000	158.30														The highest MPE configuration has SAR below 50% of the limit.										
HAF4016A	868.9875	HAD4006A	140.0000	158.20															The highest MPE configuration has SAR below 50% of the limit.									
HAF4016A	860.5000	HAD4006A	140.0000	158.10																The highest MPE configuration has SAR below 50% of the limit.								
HAF4016A	769.0125	HAD4006A	144.0000	140.40																	The highest MPE configuration has SAR below 50% of the limit.							
HAF4016A	823.9875	HAD4006A	144.0000	140.30																		The highest MPE configuration has SAR below 50% of the limit.						
HAF4016A	772.0000	HAD4006A	144.0000	139.90																			The highest MPE configuration has SAR below 50% of the limit.					
HAF4016A	774.9875	HAD4006A	144.0000	139.90																				The highest MPE configuration has SAR below 50% of the limit.				
HAF4016A	799.0125	HAD4006A	144.0000	139.30																					The highest MPE configuration has SAR below 50% of the limit.			
HAF4016A	811.5000	HAD4006A	144.0000	137.70																						The highest MPE configuration has SAR below 50% of the limit.		
HAF4016A	851.0125	HAD4006A	144.0000	136.60																							The highest MPE configuration has SAR below 50% of the limit.	
HAF4016A	868.9875	HAD4006A	144.0000	136.50																								The highest MPE configuration has SAR below 50% of the limit.
HAF4016A	860.5000	HAD4006A	144.0000	136.40																								
HAF4017A	774.9875	HAD4006A	140.0000	166.40	Back Center Back Side	0.07 0.07	0.003 0.003	0.12 0.20	0.007 0.008	0.19 0.27	0.010 0.011	The highest MPE configuration has SAR below 50% of the limit.																
HAF4017A	772.0000	HAD4006A	140.0000	166.30									The highest MPE configuration has SAR below 50% of the limit.															
HAF4017A	769.0125	HAD4006A	140.0000	165.70										The highest MPE configuration has SAR below 50% of the limit.														
HAF4017A	799.0125	HAD4006A	140.0000	165.40											The highest MPE configuration has SAR below 50% of the limit.													
HAF4017A	823.9875	HAD4006A	140.0000	163.20												The highest MPE configuration has SAR below 50% of the limit.												
HAF4017A	811.5000	HAD4006A	140.0000	162.90													The highest MPE configuration has SAR below 50% of the limit.											
HAF4017A	860.5000	HAD4006A	140.0000	162.00														The highest MPE configuration has SAR below 50% of the limit.										
HAF4017A	851.0125	HAD4006A	140.0000	159.40															The highest MPE configuration has SAR below 50% of the limit.									
HAF4017A	868.9875	HAD4006A	140.0000	159.20																The highest MPE configuration has SAR below 50% of the limit.								
HAF4017A	774.9875	HAD4006A	144.0000	144.70																	The highest MPE configuration has SAR below 50% of the limit.							
HAF4017A	772.0000	HAD4006A	144.0000	144.60																		The highest MPE configuration has SAR below 50% of the limit.						
HAF4017A	769.0125	HAD4006A	144.0000	144.00																			The highest MPE configuration has SAR below 50% of the limit.					
HAF4017A	799.0125	HAD4006A	144.0000	143.70																				The highest MPE configuration has SAR below 50% of the limit.				
HAF4017A	823.9875	HAD4006A	144.0000	141.50																					The highest MPE configuration has SAR below 50% of the limit.			
HAF4017A	811.5000	HAD4006A	144.0000	141.20																						The highest MPE configuration has SAR below 50% of the limit.		
HAF4017A	860.5000	HAD4006A	144.0000	140.30																							The highest MPE configuration has SAR below 50% of the limit.	
HAF4017A	851.0125	HAD4006A	144.0000	137.70																								The highest MPE configuration has SAR below 50% of the limit.
HAF4017A	868.9875	HAD4006A	144.0000	137.50																								

**Table 4 continued: SAR Simulation Reduction Considerations for Back Seat Passenger  
(ISED Canada)**

APX 6500 7/800 Band		DVR VHF		Combine MPE (%)	Exposure Location	APX 6500 7/800 Band		DVR VHF Adjusted SAR Results (W/kg)		Combine Adjusted SAR Results (W/kg)		SAR Simulation Reduction
Antenna Kit#	Freq (MHz)	Antenna Kit#	Freq (MHz)			1g	WB	1g	WB	1g	WB	
HAF4013A	772.0000	HAD4007A	144.0000	123.70	Back Center	0.04	0.002	0.34	0.018	0.38	0.020	The highest MPE configuration has SAR below 50% of the limit.
HAF4013A	774.9875	HAD4007A	144.0000	123.70	Back Side	0.03	0.002	0.27	0.014	0.30	0.016	
HAF4013A	769.0125	HAD4007A	144.0000	122.90								
HAF4013A	799.0125	HAD4007A	144.0000	122.50								
HAF4013A	823.9875	HAD4007A	144.0000	122.40								
HAF4013A	811.5000	HAD4007A	144.0000	121.50								
HAF4013A	860.5000	HAD4007A	144.0000	120.20								
HAF4013A	868.9875	HAD4007A	144.0000	119.40								
HAF4013A	851.0125	HAD4007A	144.0000	119.00								
HAF4014A	823.9875	HAD4007A	144.0000	121.30	Back Center	0.04	0.002	0.34	0.018	0.38	0.020	
HAF4014A	811.5000	HAD4007A	144.0000	120.40	Back Side	0.05	0.001	0.27	0.014	0.32	0.015	
HAF4014A	851.0125	HAD4007A	144.0000	120.30								
HAF4014A	868.9875	HAD4007A	144.0000	120.30								
HAF4014A	860.5000	HAD4007A	144.0000	119.10								
HAF4014A	799.0125	HAD4007A	144.0000	118.50								
HAF4014A	769.0125	HAD4007A	144.0000	116.90								
HAF4014A	772.0000	HAD4007A	144.0000	116.90								
HAF4014A	774.9875	HAD4007A	144.0000	116.80								
HAF4016A	769.0125	HAD4007A	144.0000	123.60	Back Center	0.04	0.002	0.34	0.018	0.38	0.020	The highest MPE configuration has SAR below 50% of the limit.
HAF4016A	823.9875	HAD4007A	144.0000	123.50	Back Side	0.05	0.002	0.27	0.014	0.32	0.016	
HAF4016A	772.0000	HAD4007A	144.0000	123.10								
HAF4016A	774.9875	HAD4007A	144.0000	123.10								
HAF4016A	799.0125	HAD4007A	144.0000	122.50								
HAF4016A	811.5000	HAD4007A	144.0000	120.90								
HAF4016A	851.0125	HAD4007A	144.0000	119.80								
HAF4016A	868.9875	HAD4007A	144.0000	119.70								
HAF4016A	860.5000	HAD4007A	144.0000	119.60								
HAF4017A	774.9875	HAD4007A	144.0000	127.90	Back Center	0.07	0.003	0.34	0.018	0.41	0.021	
HAF4017A	772.0000	HAD4007A	144.0000	127.80	Back Side	0.07	0.003	0.27	0.014	0.34	0.017	
HAF4017A	769.0125	HAD4007A	144.0000	127.20								
HAF4017A	799.0125	HAD4007A	144.0000	126.90								
HAF4017A	823.9875	HAD4007A	144.0000	124.70								
HAF4017A	811.5000	HAD4007A	144.0000	124.40								
HAF4017A	860.5000	HAD4007A	144.0000	123.50								
HAF4017A	851.0125	HAD4007A	144.0000	120.90								
HAF4017A	868.9875	HAD4007A	144.0000	120.70								

**Table 4 continued: SAR Simulation Reduction Considerations for Back Seat Passenger  
(ISED Canada)**

APX 6500 7/800 Band		DVR VHF		Combine MPE (%)	Exposure Location	APX 6500 7/800 Band		DVR VHF Adjusted SAR Results (W/kg)		Combine Adjusted SAR Results (W/kg)		SAR Simulation Reduction	
Antenna Kit#	Freq (MHz)	Antenna Kit#	Freq (MHz)			1g	WB	1g	WB	1g	WB		
HAF4013A	772.0000	HAD4008A	162.0000	188.60	Back Center Back Side	0.04 0.03	0.002 0.002	0.31 0.67	0.018 0.019	0.35 0.70	0.020 0.021	The highest MPE configuration has SAR below 50% of the limit.	
HAF4013A	774.9875	HAD4008A	162.0000	188.60									
HAF4013A	769.0125	HAD4008A	162.0000	187.80									
HAF4013A	799.0125	HAD4008A	162.0000	187.40									
HAF4013A	823.9875	HAD4008A	162.0000	187.30									
HAF4013A	811.5000	HAD4008A	162.0000	186.40									
HAF4013A	860.5000	HAD4008A	162.0000	185.10									
HAF4013A	868.9875	HAD4008A	162.0000	154.30									
HAF4013A	851.0125	HAD4008A	162.0000	183.90									
HAF4013A	772.0000	HAD4008A	156.4000	121.00									
HAF4013A	774.9875	HAD4008A	156.4000	121.00									
HAF4013A	769.0125	HAD4008A	156.4000	120.20									
HAF4013A	799.0125	HAD4008A	156.4000	119.80									
HAF4013A	823.9875	HAD4008A	156.4000	119.70									
HAF4013A	811.5000	HAD4008A	156.4000	118.80									
HAF4013A	860.5000	HAD4008A	156.4000	117.50									
HAF4013A	868.9875	HAD4008A	156.4000	116.70									
HAF4013A	851.0125	HAD4008A	156.4000	116.30									
HAF4014A	823.9875	HAD4008A	162.0000	186.20	Back Center Back Side	0.04 0.05	0.002 0.001	0.31 0.67	0.018 0.019	0.35 0.72	0.020 0.020	The highest MPE configuration has SAR below 50% of the limit.	
HAF4014A	811.5000	HAD4008A	162.0000	185.30									
HAF4014A	851.0125	HAD4008A	162.0000	185.20									
HAF4014A	868.9875	HAD4008A	162.0000	185.20									
HAF4014A	860.5000	HAD4008A	162.0000	184.00									
HAF4014A	799.0125	HAD4008A	162.0000	183.40									
HAF4014A	769.0125	HAD4008A	162.0000	181.80									
HAF4014A	772.0000	HAD4008A	162.0000	181.80									
HAF4014A	774.9875	HAD4008A	162.0000	181.70									
HAF4014A	823.9875	HAD4008A	156.4000	118.60									
HAF4014A	811.5000	HAD4008A	156.4000	117.70									
HAF4014A	851.0125	HAD4008A	156.4000	117.60									
HAF4014A	868.9875	HAD4008A	156.4000	117.60									
HAF4014A	860.5000	HAD4008A	156.4000	116.40									
HAF4014A	799.0125	HAD4008A	156.4000	115.80									
HAF4014A	769.0125	HAD4008A	156.4000	114.20									
HAF4014A	772.0000	HAD4008A	156.4000	114.20									
HAF4014A	774.9875	HAD4008A	156.4000	114.10									

**Table 4 continued: SAR Simulation Reduction Considerations for Back Seat Passenger  
(ISED Canada)**

APX 6500 7/800 Band		DVR VHF		Combine MPE (%)	Exposure Location	APX 6500 7/800 Band		DVR VHF Adjusted SAR Results (W/kg)		Combine Adjusted SAR Results (W/kg)		SAR Simulation Reduction	
Antenna Kit#	Freq (MHz)	Antenna Kit#	Freq (MHz)			1g	WB	1g	WB	1g	WB		
HAF4016A	769.0125	HAD4008A	162.0000	188.50	Back Center Back Side	0.04	0.002	0.31	0.018	0.35	0.020	The highest MPE configuration has SAR below 50% of the limit.	
HAF4016A	823.9875	HAD4008A	162.0000	188.40		0.05	0.002	0.67	0.019	0.72	0.021		
HAF4016A	772.0000	HAD4008A	162.0000	188.00									
HAF4016A	774.9875	HAD4008A	162.0000	188.00									
HAF4016A	799.0125	HAD4008A	162.0000	187.40									
HAF4016A	811.5000	HAD4008A	162.0000	185.80									
HAF4016A	851.0125	HAD4008A	162.0000	184.70									
HAF4016A	868.9875	HAD4008A	162.0000	184.60									
HAF4016A	860.5000	HAD4008A	162.0000	184.50									
HAF4016A	769.0125	HAD4008A	156.4000	120.90									
HAF4016A	823.9875	HAD4008A	156.4000	120.80									
HAF4016A	772.0000	HAD4008A	156.4000	120.40									
HAF4016A	774.9875	HAD4008A	156.4000	120.40									
HAF4016A	799.0125	HAD4008A	156.4000	119.80									
HAF4016A	811.5000	HAD4008A	156.4000	118.20									
HAF4016A	851.0125	HAD4008A	156.4000	117.10									
HAF4016A	868.9875	HAD4008A	156.4000	117.00									
HAF4016A	860.5000	HAD4008A	156.4000	116.90									
HAF4017A	774.9875	HAD4008A	162.0000	192.80	Back Center Back Side	0.07	0.003	0.31	0.018	0.38	0.021		The highest MPE configuration has SAR below 50% of the limit.
HAF4017A	772.0000	HAD4008A	162.0000	192.70		0.07	0.003	0.67	0.019	0.74	0.022		
HAF4017A	769.0125	HAD4008A	162.0000	192.10									
HAF4017A	799.0125	HAD4008A	162.0000	191.80									
HAF4017A	823.9875	HAD4008A	162.0000	189.60									
HAF4017A	911.5000	HAD4008A	162.0000	189.30									
HAF4017A	860.5000	HAD4008A	162.0000	188.40									
HAF4017A	851.0125	HAD4008A	162.0000	185.80									
HAF4017A	868.9875	HAD4008A	162.0000	185.60									
HAF4017A	774.9875	HAD4008A	156.4000	125.20									
HAF4017A	772.0000	HAD4008A	156.4000	125.10									
HAF4017A	769.0125	HAD4008A	156.4000	124.50									
HAF4017A	799.0125	HAD4008A	156.4000	124.20									
HAF4017A	823.9875	HAD4008A	156.4000	122.00									
HAF4017A	911.5000	HAD4008A	156.4000	121.70									
HAF4017A	860.5000	HAD4008A	156.4000	120.80									
HAF4017A	851.0125	HAD4008A	156.4000	118.20									
HAF4017A	868.9875	HAD4008A	156.4000	118.00									

**Table 4 continued: SAR Simulation Reduction Considerations for Back Seat Passenger  
(ISED Canada)**

APX 6500 7/800 Band		DVR VHF		Combine MPE (%)	Exposure Location	APX 6500 7/800 Band		DVR VHF Adjusted SAR Results (W/kg)		Combine Adjusted SAR Results (W/kg)		SAR Simulation Reduction	
Antenna Kit#	Freq (MHz)	Antenna Kit#	Freq (MHz)			1g	WB	1g	WB	1g	WB		
HAF4013A	772.0000	HAD4009A	173.4000	153.70	Back Center	0.04	0.002	0.19	0.013	0.23	0.015	The highest MPE configuration has SAR below 50% of the limit.	
HAF4013A	774.9875	HAD4009A	173.4000	153.70	Back Side	0.03	0.002	0.52	0.015	0.55	0.017		
HAF4013A	769.0125	HAD4009A	173.4000	152.90									
HAF4013A	799.0125	HAD4009A	173.4000	152.50									
HAF4013A	823.9875	HAD4009A	173.4000	152.40									
HAF4013A	811.5000	HAD4009A	173.4000	151.50									
HAF4013A	860.5000	HAD4009A	173.4000	150.20									
HAF4013A	868.9875	HAD4009A	173.4000	149.40									
HAF4013A	851.0125	HAD4009A	173.4000	149.00									
HAF4013A	772.0000	HAD4009A	162.0000	144.30									
HAF4013A	774.9875	HAD4009A	162.0000	144.30									
HAF4013A	769.0125	HAD4009A	162.0000	143.50									
HAF4013A	799.0125	HAD4009A	162.0000	143.10									
HAF4013A	823.9875	HAD4009A	162.0000	143.00									
HAF4013A	811.5000	HAD4009A	162.0000	142.10									
HAF4013A	860.5000	HAD4009A	162.0000	140.80									
HAF4013A	868.9875	HAD4009A	162.0000	140.00									
HAF4013A	851.0125	HAD4009A	162.0000	139.60									
HAF4013A	772.0000	HAD4009A	167.7000	135.10									
HAF4013A	774.9875	HAD4009A	167.7000	135.10									
HAF4013A	769.0125	HAD4009A	167.7000	134.30									
HAF4013A	799.0125	HAD4009A	167.7000	133.90									
HAF4013A	823.9875	HAD4009A	167.7000	133.80									
HAF4013A	811.5000	HAD4009A	167.7000	132.90									
HAF4013A	860.5000	HAD4009A	167.7000	131.60									
HAF4013A	868.9875	HAD4009A	167.7000	140.00									
HAF4013A	851.0125	HAD4009A	167.7000	130.40									
HAF4014A	823.9875	HAD4009A	173.4000	151.30	Back Center	0.04	0.002	0.19	0.013	0.23	0.015		The highest MPE configuration has SAR below 50% of the limit.
HAF4014A	811.5000	HAD4009A	173.4000	150.40	Back Side	0.05	0.001	0.52	0.015	0.57	0.016		
HAF4014A	851.0125	HAD4009A	173.4000	150.30									
HAF4014A	868.9875	HAD4009A	173.4000	150.30									
HAF4014A	860.5000	HAD4009A	173.4000	149.10									
HAF4014A	799.0125	HAD4009A	173.4000	148.50									
HAF4014A	769.0125	HAD4009A	173.4000	146.90									
HAF4014A	772.0000	HAD4009A	173.4000	146.90									
HAF4014A	774.9875	HAD4009A	173.4000	146.80									
HAF4014A	823.9875	HAD4009A	162.0000	141.90									
HAF4014A	811.5000	HAD4009A	162.0000	141.00									
HAF4014A	851.0125	HAD4009A	162.0000	140.90									
HAF4014A	868.9875	HAD4009A	162.0000	140.90									
HAF4014A	860.5000	HAD4009A	162.0000	139.70									
HAF4014A	799.0125	HAD4009A	162.0000	139.10									
HAF4014A	769.0125	HAD4009A	162.0000	137.50									
HAF4014A	772.0000	HAD4009A	162.0000	137.50									
HAF4014A	774.9875	HAD4009A	162.0000	137.40									
HAF4014A	823.9875	HAD4009A	167.7000	132.70									
HAF4014A	811.5000	HAD4009A	167.7000	131.80									
HAF4014A	851.0125	HAD4009A	167.7000	131.70									
HAF4014A	868.9875	HAD4009A	167.7000	131.70									
HAF4014A	860.5000	HAD4009A	167.7000	130.50									
HAF4014A	799.0125	HAD4009A	167.7000	129.90									
HAF4014A	769.0125	HAD4009A	167.7000	128.30									
HAF4014A	772.0000	HAD4009A	167.7000	128.30									
HAF4014A	774.9875	HAD4009A	167.7000	128.20									



**Table 4 continued: SAR Simulation Reduction Considerations for Back Seat Passenger  
(ISED Canada)**

APX 6500 7/800 Band		DVR VHF		Combine MPE (%)	Exposure Location	APX 6500 7/800 Band		DVR VHF Adjusted SAR Results (W/kg)		Combine Adjusted SAR Results (W/kg)		SAR Simulation Reduction	
Antenna Kit#	Freq (MHz)	Antenna Kit#	Freq (MHz)			1g	WB	1g	WB	1g	WB		
HAF4016A	769.0125	HAD4009A	173.4000	153.60	Back Center	0.04	0.002	0.19	0.013	0.23	0.015	The highest MPE configuration has SAR below 50% of the limit.	
HAF4016A	823.9875	HAD4009A	173.4000	153.50	Back Side	0.05	0.002	0.52	0.015	0.57	0.017		
HAF4016A	772.0000	HAD4009A	173.4000	153.10									
HAF4016A	774.9875	HAD4009A	173.4000	153.10									
HAF4016A	799.0125	HAD4009A	173.4000	152.50									
HAF4016A	811.5000	HAD4009A	173.4000	150.90									
HAF4016A	851.0125	HAD4009A	173.4000	149.80									
HAF4016A	868.9875	HAD4009A	173.4000	149.70									
HAF4016A	860.5000	HAD4009A	173.4000	149.60									
HAF4016A	769.0125	HAD4009A	162.0000	144.20									
HAF4016A	823.9875	HAD4009A	162.0000	144.10									
HAF4016A	772.0000	HAD4009A	162.0000	143.70									
HAF4016A	774.9875	HAD4009A	162.0000	143.70									
HAF4016A	799.0125	HAD4009A	162.0000	143.10									
HAF4016A	811.5000	HAD4009A	162.0000	141.50									
HAF4016A	851.0125	HAD4009A	162.0000	140.40									
HAF4016A	868.9875	HAD4009A	162.0000	140.30									
HAF4016A	860.5000	HAD4009A	162.0000	140.20									
HAF4016A	769.0125	HAD4009A	167.7000	135.00									
HAF4016A	823.9875	HAD4009A	167.7000	134.90									
HAF4016A	772.0000	HAD4009A	167.7000	134.50									
HAF4016A	774.9875	HAD4009A	167.7000	134.50									
HAF4016A	799.0125	HAD4009A	167.7000	133.90									
HAF4016A	811.5000	HAD4009A	167.7000	132.30									
HAF4016A	851.0125	HAD4009A	167.7000	131.20									
HAF4016A	868.9875	HAD4009A	167.7000	131.10									
HAF4016A	860.5000	HAD4009A	167.7000	131.00									
HAF4017A	774.9875	HAD4009A	173.4000	157.90	Back Center	0.07	0.003	0.19	0.013	0.26	0.016		The highest MPE configuration has SAR below 50% of the limit.
HAF4017A	772.0000	HAD4009A	173.4000	157.80	Back Side	0.07	0.003	0.52	0.015	0.59	0.018		
HAF4017A	769.0125	HAD4009A	173.4000	157.20									
HAF4017A	799.0125	HAD4009A	173.4000	156.90									
HAF4017A	823.9875	HAD4009A	173.4000	154.70									
HAF4017A	911.5000	HAD4009A	173.4000	154.40									
HAF4017A	860.5000	HAD4009A	173.4000	153.50									
HAF4017A	851.0125	HAD4009A	173.4000	150.90									
HAF4017A	868.9875	HAD4009A	173.4000	150.70									
HAF4017A	774.9875	HAD4009A	162.0000	148.50									
HAF4017A	772.0000	HAD4009A	162.0000	148.40									
HAF4017A	769.0125	HAD4009A	162.0000	147.80									
HAF4017A	799.0125	HAD4009A	162.0000	147.50									
HAF4017A	823.9875	HAD4009A	162.0000	145.30									
HAF4017A	911.5000	HAD4009A	162.0000	145.00									
HAF4017A	860.5000	HAD4009A	162.0000	144.10									
HAF4017A	851.0125	HAD4009A	162.0000	141.50									
HAF4017A	868.9875	HAD4009A	162.0000	141.30									
HAF4017A	774.9875	HAD4009A	167.7000	139.30									
HAF4017A	772.0000	HAD4009A	167.7000	139.20									
HAF4017A	769.0125	HAD4009A	167.7000	138.60									
HAF4017A	799.0125	HAD4009A	167.7000	138.30									
HAF4017A	823.9875	HAD4009A	167.7000	136.10									
HAF4017A	911.5000	HAD4009A	167.7000	135.80									
HAF4017A	860.5000	HAD4009A	167.7000	134.90									
HAF4017A	851.0125	HAD4009A	167.7000	132.30									
HAF4017A	868.9875	HAD4009A	167.7000	132.10									

**Results of SAR Computations for combined exposure**

From all simulated results, the highest peak 1-g SAR values were identified for both DVR VHF and APX6500 mobile radio exposures and then summed up to produce the composite combined peak SAR value for corresponding locations of the human body model. Tables 5 and 6 present the highest combined peak 1-g and whole-body SAR values, respectively.

**Table 5: Worst case peak 1-g average SAR for passenger exposure conditions and combined 1-g average SAR from simultaneous exposure.**

	Passenger location	DVR VHF [W/kg]	Mobile APX6500 [W/kg]	Total 1-g SAR [W/kg]
FCC US	Back Center	0.31	0.08	0.39
	Back Side	0.67	0.08	0.75
ISED Canada	Back Center	0.34	0.07	0.41
	Back Side	0.67	0.07	0.74

**Table 6: Worst case peak whole body average SAR for passenger exposure conditions and combined whole body average SAR from simultaneous exposure.**

	Passenger location	DVR VHF [W/kg]	Mobile APX6500 [W/kg]	Total WB SAR [W/kg]
FCC US	Back Center	0.018	0.003	0.021
	Back Side	0.019	0.004	0.023
ISED Canada	Back Center	0.018	0.003	0.021
	Back Side	0.019	0.003	0.022

In summary, the maximum combined peak 1-g SAR is 0.75 W/kg, less than the 1.6 W/kg limit, while the maximum combined whole-body average SAR is 0.023 W/kg, less than the 0.08 W/kg limit.

## Conclusions

Under the test conditions described for evaluating passenger exposure to the RF electromagnetic fields emitted by vehicle-mounted antennas used in conjunction with this mobile radio product, the present analysis shows that the computed SAR values are compliant with the FCC US and ISED Canada general public 1-g and whole body SAR limits.

## References

- [1] Health Canada Safety Code 6 (2015). Limits of Human Exposure to Radiofrequency Electromagnetic Energy in the Frequency Range from 3 kHz to 300 GHz.
- [2] IEEE Standard C95.1-1999. *IEEE Standard for Safety Levels with Respect to Human Exposure to RF Electromagnetic Fields*, 3 kHz to 300 GHz.
- [3] [http://www.nlm.nih.gov/research/visible/visible\\_human.html](http://www.nlm.nih.gov/research/visible/visible_human.html)
- [4] ICNIRP (International Commission on Non-Ionising Radiation Protection) 1998. *Guidelines for limiting exposure to time-varying electric, magnetic and electromagnetic fields (up to 300 GHz)*. Health Phys. 74:494–522.
- [5] IEEE Standard for Safety Levels with Respect to Human Exposure to Electric, Magnetic, and Electromagnetic Fields, 0 Hz to 300 GHz. IEEE Std C95.1-2019 (Revision of IEEE Std C95.1-2005/ Incorporates IEEE Std C95.1-2019/Cor 1-2019) .