APPENDIX 1 - COMPARISON OF PEAK RECEIVE SIGNAL LEVELS (RSLs) GENERATED BY SAVI INTERROGATORS COMPUTED BY VARIOUS METHODS

P = 10 log(P1/P2)

Peak EIRP at Source = 3.63 mW
Peak EIRP at Source = 5.59907 dBm
Peak EIRP at Source = -24.401 dBW

Field Strength @ 3 meters = 110,000 microvolts / meter

	Valid Methodology	Valid Methodology	Valid Methodology	INVALID METHODOLOGY	Valid Methodology	INVALID METHODOLOGY	Valid Methodology	N/A	N/A
Distance From Source (Meters)	**ARRL-Provided RSL Figures**	**WA2IWW-Computed RSL Figures (Excel Spreadsheet) Using ARRL Formula**	**Savi-Provided RSL Figure At 3 Meter Reference Point Using Savi Formula 1**	**Savi-Provided RSL Figures Obtained By Inappropriately Summing Savi Formula 1 (RSL At 3 Meter Reference Point) And Savi Formula 2 (Path Loss)**	**WA2IWW-Computed RSL Figures (Excel Spreadsheet) Using Savi Formula 1 (RSL At 3 Meter Reference Point) With ARRL Distance Correction Term (20 log(D1/D2))**	**WA2IWW-Computed RSL Figures (Excel Spreadsheet) Using Savi Formula 2 (Path Loss) Inappropriately Referenced To -28.17 dBm RSL Level At 3 Meter Reference Point**	**WA2IWW - Computed RSL Figures (Excel Spreadsheet) Using Savi Formula 2 (Path Loss) Appropriately Referenced To +5.599 dBm EIRP Of Signal Source (Savi Interrogator)**	**Savi Error Due To Inappropriate Summing of Savi Formula 1 (RSL At 3 Meter Reference Point) And Savi Formula 2 (Path Loss)**	**WA2IWW Error Due To Inappropriate Use Of RSL At 3 Meter Reference Point Instead Of EIRP Of Signal Source (Savi Interrogator) In Savi Formula 2 (Path Loss)**
3 (reference)	-28.92 dBm -58.92 dBW	-29.13 dBm -59.13 dBW	-28.17 dBm -58.17 dBW	**Not Specified By Savi**	-29.025 dBm -59.025 dBW	**-62.91062 dBm -92.91062 dBW**	-29.14155 dBm -59.14155 dBW	N/A	**-33.76907 dB**
100	-59.38 dBm -89.38 dBW	-59.588 dBm -89.588 dBW	**Not Specified By Savi**	**-92.57 dBm -122.57 dBW**	-59.483 dBm -89.483 dBW	**-93.36819 dBm -123.3682 dBW**	-59.59913 dBm -89.59913 dBW	**-33.08703 dB**	**-33.76907 dB**
1000	-79.38 dBm -109.38 dBW	-79.588 dBm -109.59 dBW	**Not Specified By Savi**	**-112.57 dBm -142.57 dBW**	-79.483 dBm -109.48 dBW	**-113.3682 dBm -143.3682 dBW**	-79.59913 dBm -109.5991 dBW	**-33.08703 dB**	**-33.76907 dB**

APPENDIX 2 - COMPARISON OF PEAK RECEIVE SIGNAL LEVELS (RSLs) GENERATED BY SAVI TAGS COMPUTED BY VARIOUS METHODS

P = 10 log(P1/P2)

Peak EIRP at Source = 0.6 mW
Peak EIRP at Source = -2.2185 dBm
Peak EIRP at Source = -32.218 dBW

Field Strength @ 3 meters = 43,980 microvolts / meter

	N/A	Valid Methodology	Valid Methodology	INVALID METHODOLOGY	Valid Methodology	INVALID METHODOLOGY	Valid Methodology	N/A	N/A
Distance From Source (Meters)	**ARRL-Provided RSL Figures**	**WA2IWW-Computed RSL Figures (Excel Spreadsheet) Using ARRL Formula**	**Savi-Provided RSL Figure At 3 Meter Reference Point Using Savi Formula 1**	**Savi-Provided RSL Figures Obtained By Inappropriately Summing Savi Formula 1 (RSL At 3 Meter Reference Point) And Savi Formula 2 (Path Loss)**	**WA2IWW-Computed RSL Figures (Excel Spreadsheet) Using Savi Formula 1 (RSL At 3 Meter Reference Point) With ARRL Distance Correction Term (20 log(D1/D2))**	**WA2IWW-Computed RSL Figures (Excel Spreadsheet) Using Savi Formula 2 (Path Loss) Inappropriately Referenced To -36.13 dBm RSL At 3 Meter Reference Point**	**WA2IWW-Computed RSL Figures (Excel Spreadsheet) Using Savi Formula 2 (Path Loss) Appropriately Referenced To -2.21 dBm EIRP Of Signal Source (Savi Tag)**	**Savi Error Due To Inappropriate Summing of Savi Formula 1 (RSL At 3 Meter Reference Point) And Savi Formula 2 (Path Loss)**	**WA2IWW Error Due To Inappropriate Use Of RSL At 3 Meter Reference Point Instead Of EIRP Of Signal Source (Savi Tag) In Savi Formula 2 (Path Loss)**
3 (reference)	**Not Specified By ARRL**	-37.1 dBm -67.1 dBW	-36.13 dBm -66.13 dBW	**Not Specified by Savi**	-36.988 dBm -66.988 dBW	**-70.87062 dBm -100.8706 dBW**	-36.95911 dBm -66.95911 dBW	N/A	**-33.91151 dB**
100	**Not Specified By ARRL**	-67.558 dBm -97.558 dBW	**Not Specified By Savi**	**-100.53 dBm -130.53 dBW**	-67.446 dBm -97.446 dBW	**-101.3282 dBm -131.3282 dBW**	-67.41668 dBm -97.41668 dBW	**-33.08428 dB**	**-33.91151 dB**
1000	**Not Specified By ARRL**	-87.558 dBm -117.56 dBW	**Not Specified By Savi**	**-120.53 dBm -150.53 dBW**	-87.446 dBm -117.45 dBW	**-121.3282 dBm -151.3282 dBW**	-87.41668 dBm -117.4167 dBW	**-33.08428 dB**	**-33.91151 dB**