

RF Safety Calculation ARS WBSANN

Band	Test Variables	Frequency mHz	Power Watts	Exposure Distance ft	Distance to Compliance Controlled ft	Distance to Compliance Uncontrolled ft	Antenna Gain dbi	Power Density mw/cm2	MPE Controlled mW/cm2	MPE Uncontrolled mW/cm2
HF - Fixed Distance / Fixed Power (FDFP)										
HF	FDFP	3.6	100	10	0.8	1.6	2	0.348	69.45	13.89
HF	FDFP	14.25	100	10	2.9	6.3	2	0.348	4.44	0.89
HF	FDFP	7.26	100	10	1.5	3.4	2	0.348	17.13	3.43
HF	FDFP	21.25	100	10	4.2	9.4	2	0.348	2.00	0.40
HF	FDFP	28.3	100	10	5.6	12.5	2	0.348	1.13	0.23
HF	FDFP	50.15	100	10	5.9	13.2	2	0.348	1.005	0.21
VHF/UHF Fixed Distance Variable Power (FDVP)										
VHF	FDVP	145	75	10	5.2	11.5	2	0.261	1.005	0.205
VHF	FDVP	145	50	10	4.2	9.4	2	0.174	1.005	0.205
VHF	FDVP	145	25	10	3.0	6.6	2	0.087	1.005	0.205
VHF	FDVP	145	15	10	2.3	5.2	2	0.052	1.005	0.205
VHF	FDVP	145	10	10	1.9	4.2	2	0.035	1.005	0.205
VHF	FDVP	145	5	10	1.4	3.0	2	0.017	1.005	0.205
VHF	FDVP	145	2	10	0.9	1.9	2	0.007	1.005	0.205
VHF	FDVP	145	1	10	0.6	1.4	2	0.004	1.005	0.205
UHF	FDVP	444	50	10	3.5	7.7	2	0.174	1.485	0.301
UHF	FDVP	444	25	10	2.5	5.5	2	0.087	1.485	0.301
UHF	FDVP	444	15	10	1.9	4.2	2	0.052	1.485	0.301
UHF	FDVP	444	10	10	1.6	3.5	2	0.035	1.485	0.301
UHF	FDVP	444	5	10	1.1	2.5	2	0.017	1.485	0.301
UHF	FDVP	444	2	10	0.7	1.6	2	0.007	1.485	0.301
UHF	FDVP	444	1	10	0.5	1.1	2	0.004	1.485	0.301
UHF	FDVP	1200	50	10	2.1	4.7	2	0.174	4.005	0.805
UHF	FDVP	1200	25	10	1.5	3.3	2	0.087	4.005	0.805
UHF	FDVP	1200	10	10	1.0	2.2	2	0.035	4.005	0.805
UHF	FDVP	1200	5	10	0.7	1.5	2	0.017	4.005	0.805
HT Exposure at 1 foot - Fixed Distance / Variable Power (FDVP)										
VHF HANI	FDVP	146	11	1	1.02	2.22	0	0.942	1.005	0.205
VHF HANI	FDVP	146	10	1	1.01	0.21	0	0.857	1.005	0.205
VHF HANI	FDVP	146	5	1	0.70	1.51	0	0.424	1.005	0.205
VHF HANI	FDVP	146	4	1	0.64	1.36	0	0.343	1.005	0.205
VHF HANI	FDVP	146	3	1	0.56	1.18	0	0.257	1.005	0.205
VHF HANI	FDVP	146	2	1	0.46	0.98	0	0.171	1.005	0.205
UHF HANI	FDVP	444	18	1	1.07	2.33	0	1.542	1.485	0.301
UHF HANI	FDVP	444	15	1	0.98	2.13	0	1.285	1.485	0.301
UHF HANI	FDVP	444	10	1	0.81	1.75	0	0.857	1.485	0.301
UHF HANI	FDVP	444	5	1	0.59	1.25	0	0.428	1.485	0.301
UHF HANI	FDVP	444	4	1	0.53	1.13	0	0.343	1.485	0.301
UHF HANI	FDVP	444	3	1	0.47	0.98	0	0.257	1.485	0.301
UHF HANI	FDVP	444	2	1	0.39	0.81	0	0.171	1.485	0.301
HT Exposure at 1 foot or Less -Variable Distance / Fixed Power (VDVP)										
VHF HANI	VDVP	146	5	1	0.70	1.51	0	0.428	1.005	0.205
VHF HANI	VDVP	146	5	0.8	0.70	1.51	0	0.669	1.005	0.205
VHF HANI	VDVP	146	5	0.6	0.70	1.51	0	1.190	1.005	0.205
HT Exposure at Face - Fixed Distance / Variable Power (FDVP)										
VHF HANI	FDVP	146	0.5	0.2	0.26	0.51	0	1.071	1.005	0.205
VHF HANI	FDVP	146	0.1	0.2	0.14	0.26	0	0.214	1.005	0.205
VHF HANI	FDVP	146	0.05	0.2	0.12	0.20	0	0.107	1.005	0.205
UHF HANI	FDVP	444	0.8	0.2	0.27	0.53	0	1.713	1.485	0.301
UHF HANI	FDVP	444	0.5	0.2	0.22	0.43	0	1.071	1.485	0.301
UHF HANI	FDVP	444	0.1	0.2	0.13	0.22	0	0.214	1.485	0.301
UHF HANI	FDVP	444	0.05	0.2	0.10	0.17	0	0.107	1.485	0.301

xxx Non compliant both controlled and uncontrolled
 xxx Non compliant for uncontrolled
 xxx Compliant

Source Calculation - http://hintlink.com/power_density.php