Filename: M2_6M5XHP_2.out
Frequency: 54.1 Mhz
Wavelength: 5.542 mtr

Voltage: 9519 + j 0 V
Current: 0.55 + j 38 A

Impedance: 3.6 - j 250
Parallel form: 2.e4 // - j 250

Series comp.: 0.736 uH
Parallel comp.: 0.736 uH

S.W.R.50: 362
Input power: 40000 W
Efficiency: 100 %
Structure loss: 0 uW
Radiat-eff.: %
Network loss: 0 uW
RDF [dB]:
Radiat-power: 40000 W

Excitation/Load data   ☑ Loads   ☐ Polar

Type	Tag	Seg	Impedance	Voltage	Pwr	SWR
EX 0: V-src	1	26	3.6 - j 250	9519 + j 0	5204	362
EX 0: V-src	6	26	3.6 - j 250	9519 + j 0	5204	362
EX 0: V-src	11	26	4.4 - j 250	8252 + j 0	4789	296
EX 0: V-src	16	26	4.4 - j 250	8252 + j 0	4789	296
EX 0: V-src	21	26	3.61 - j 250	9439 + j 0	5149	360
EX 0: V-src	26	26	3.61 - j 250	9439 + j 0	5149	360
EX 0: V-src	31	26	4.34 - j 250	8364 + j 0	4858	300
EX 0: V-src	36	26	4.34 - j 250	8364 + j 0	4858	300

Seg's/patches: 2040
Pattern lines: 104918
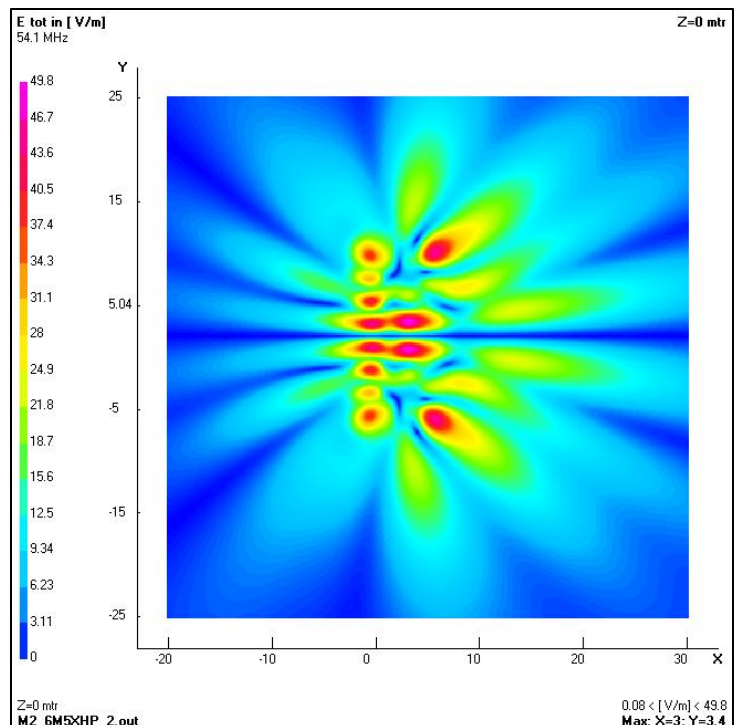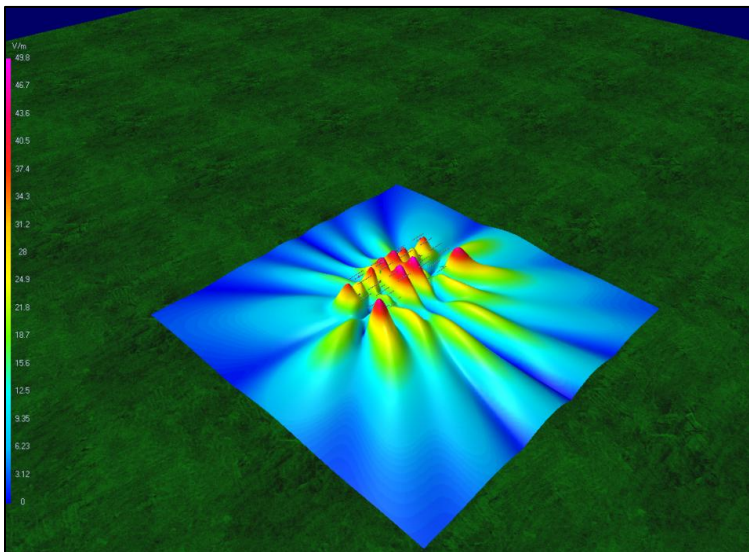Freq/Eval steps: 1
Calculation time: 373.279 s

	start	stop	count	step
X	-60	-60	1	0.12
Y	-25	25.04	418	0.12
Z	0	30	251	0.12

Total Input Power = 40 kW

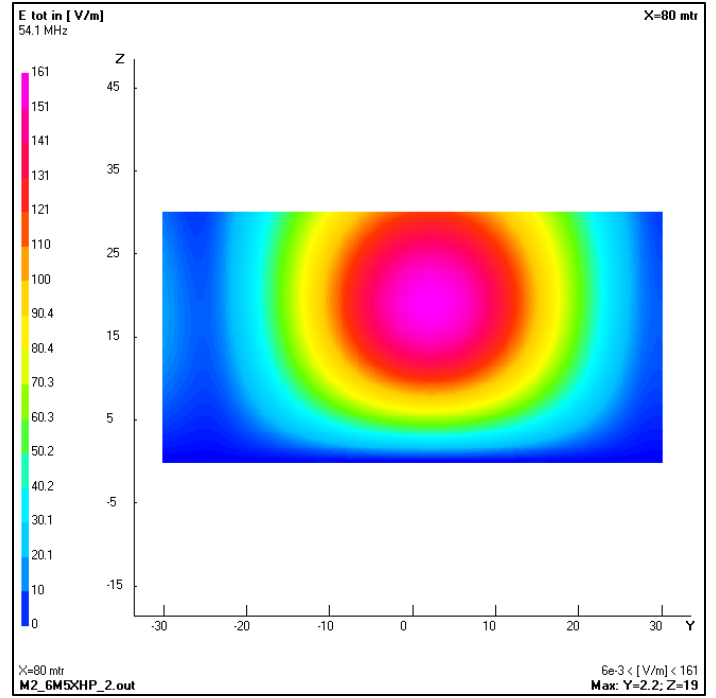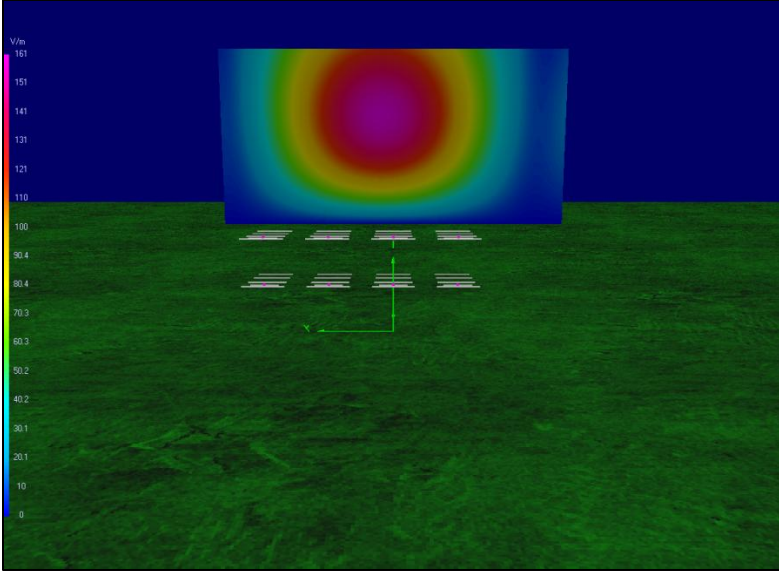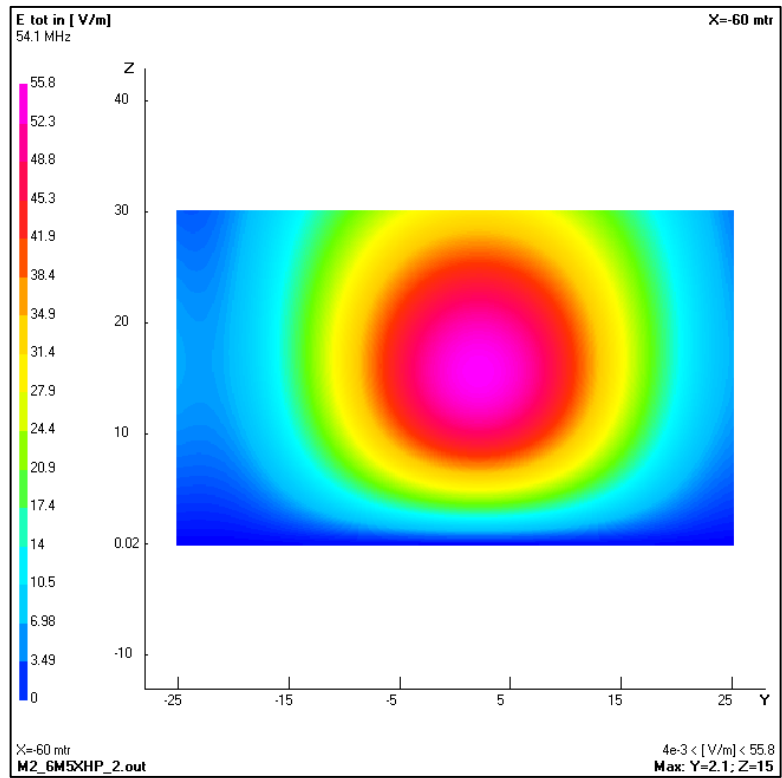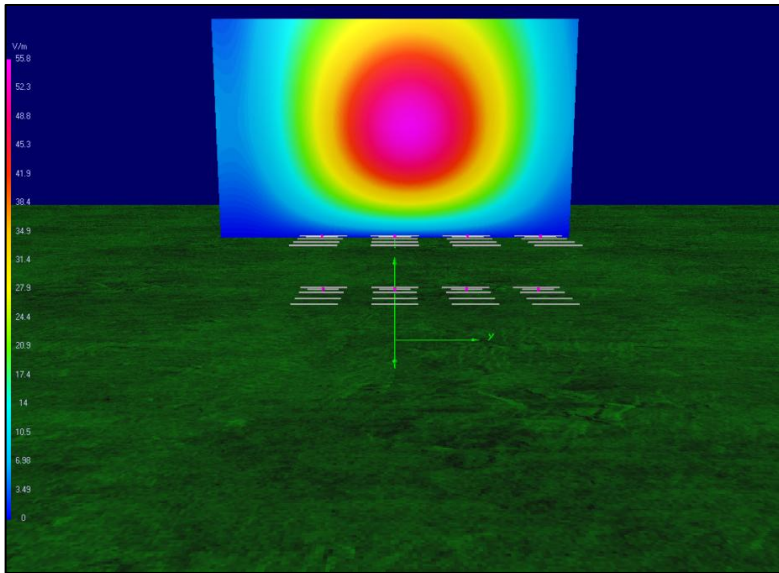**Effective Power Radiated = 100%**

Worst case scenario.

Near Field Distribution along the perfect ground plane

E tot in [V/m]
54.1 MHz
Z=0 mtr

Z=0 mtr
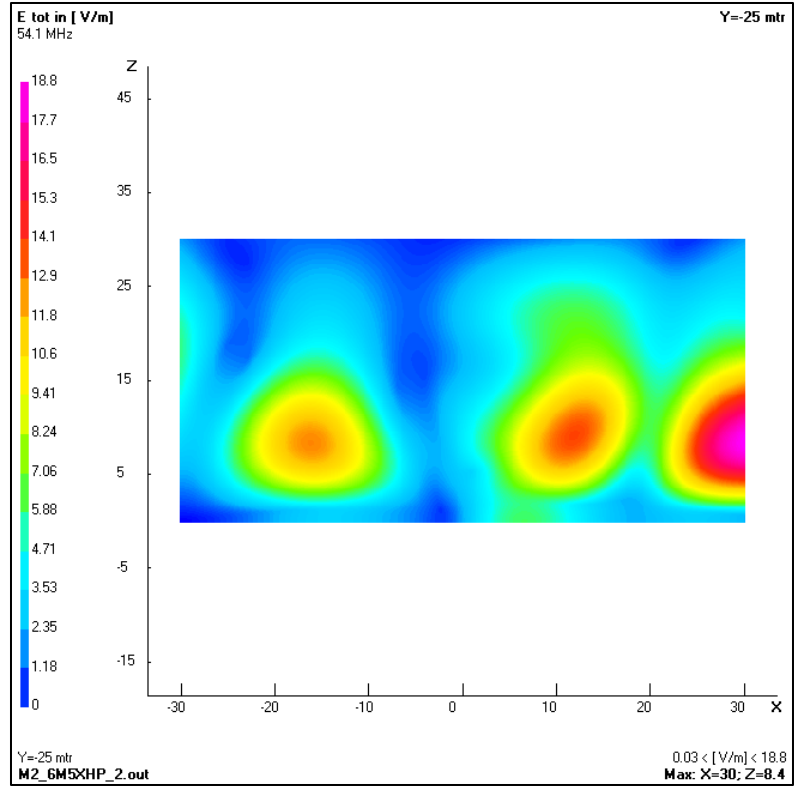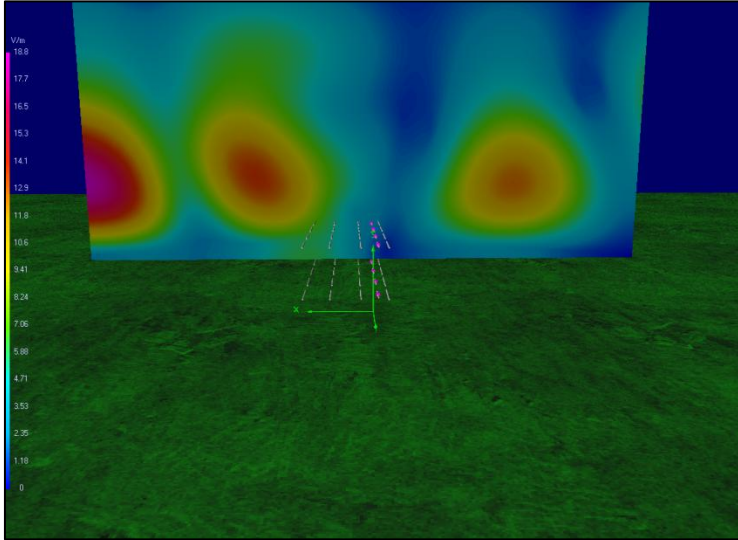M2_6M5XHP_2.out
0.08 < [V/m] < 49.8
Max: X=3; Y=3.4

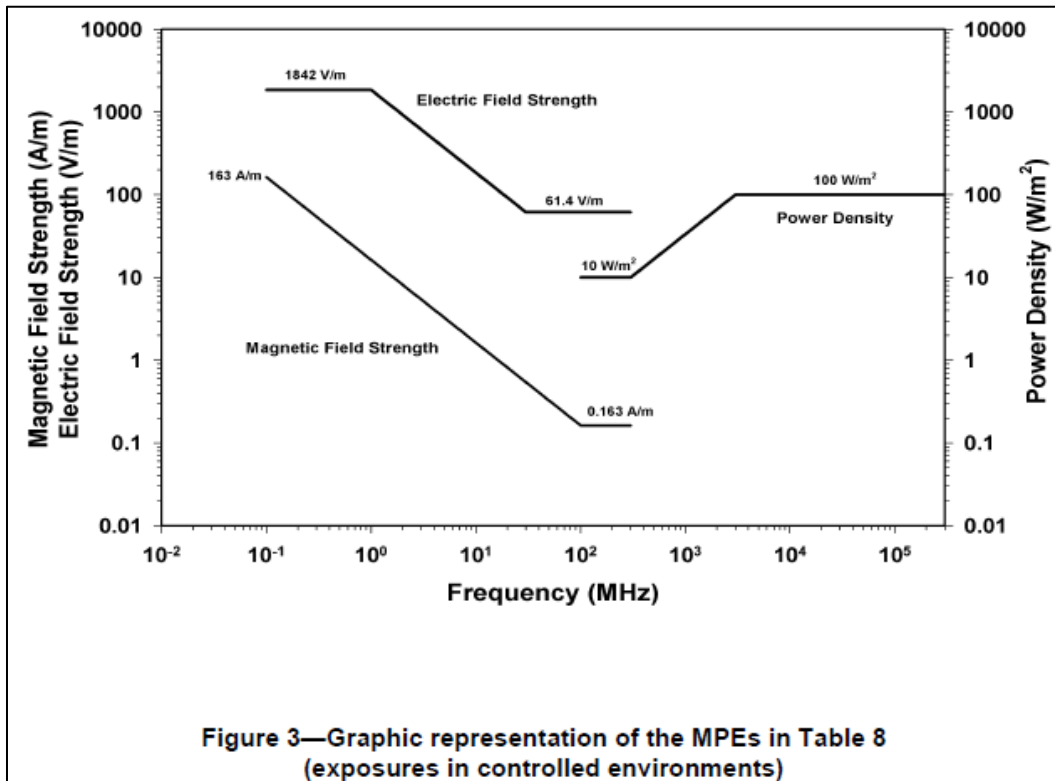## Near Field Distribution 80 m along the front lobe

Near Field Distribution 60 m behind the back lobe

Near Field Distribution 25 m from the array transmitter building side.

IEEE RF safety standards (2005).

Figure 3—Graphic representation of the MPEs in Table 8 (exposures in controlled environments)
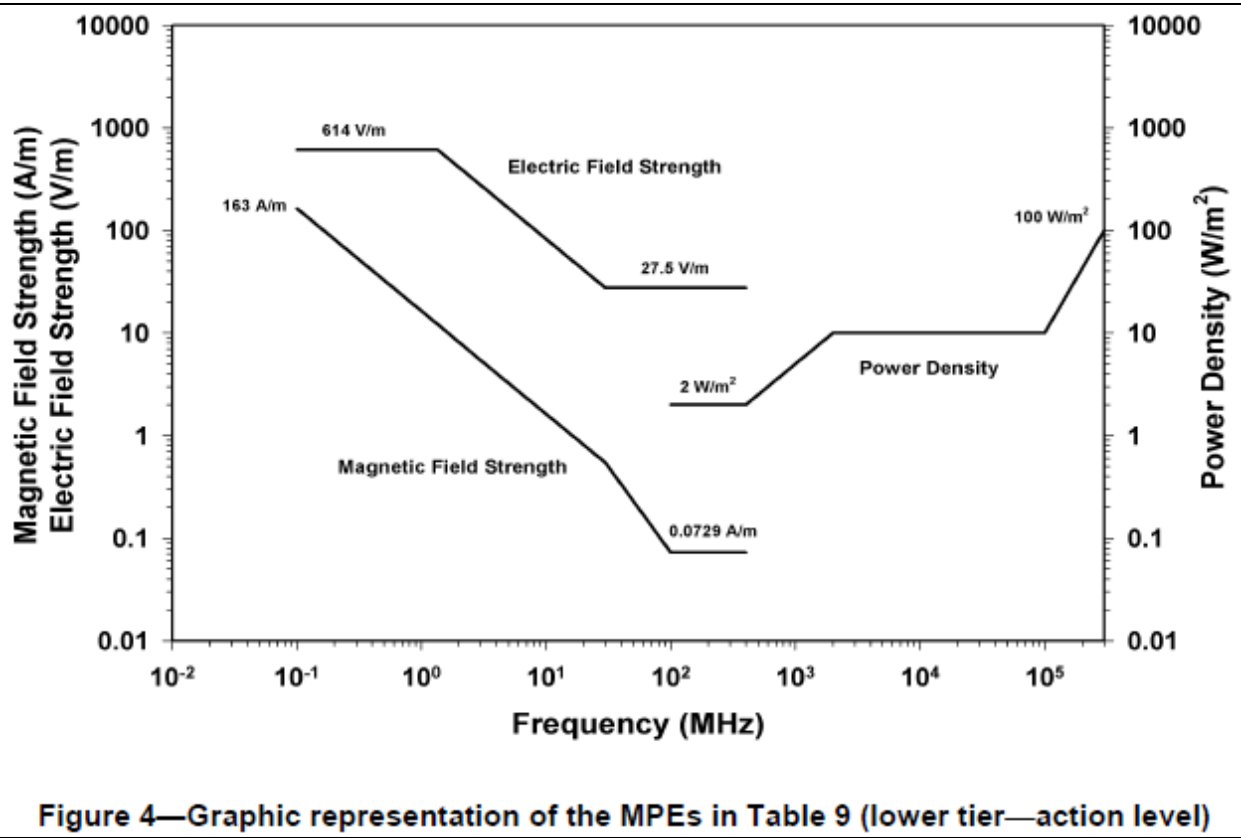
Figure 4—Graphic representation of the MPEs in Table 9 (lower tier—action level)

Table 9—Action level (MPE for the general public when an RF safety program is unavailable)
(see Figure 4 for graphical representation)

Frequency range (MHz)	RMS electric field strength (E)[a] (V/m)	RMS magnetic field strength (H)[a] (A/m)	RMS power density (S) E-field, H-field (W/m²)	Averaging time[b] $\lvert E\rvert^2$, $\lvert H\rvert^2$ or S (min)	
0.1–1.34	614	$16.3/f_M$	$(1000, 100\,000/f_M^2)^c$	6	6
1.34–3	$823.8/f_M$	$16.3/f_M$	$(1800/f_M^2, 100\,000/f_M^2)$	$f_M^2/0.3$	6
3–30	$823.8/f_M$	$16.3/f_M$	$(1800/f_M^2, 100\,000/f_M^2)$	30	6
30–100	27.5	$158.3/f_M^{1.668}$	$(2, 9\,400\,000/f_M^{3.336})$	30	$0.0636\,f_M^{1.337}$
100–400	27.5	0.0729	2	30	30
400–2000	–	–	$f_M/200$	30	
2000–5000	–	–	10	30	
5000–30 000	–	–	10	$150/f_G$	
30 000–100 000	–	–	10	$25.24/f_G^{0.476}$	
100 000–300 000	–	–	$(90f_G{-}7000)/200$	$5048/[(9f_G{-}700)f_G^{0.476}]$	

NOTE—f_M is the frequency in MHz, f_G is the frequency in GHz.

[a]For exposures that are uniform over the dimensions of the body, such as certain far-field plane-wave exposures, the exposure field strengths and power densities are compared with the MPEs in the Table. For non-uniform exposures, the mean values of the exposure fields, as obtained by spatially averaging the squares of the field strengths or averaging the power densities over an area equivalent to the vertical cross section of the human body (projected area) or a smaller area depending on the frequency (see NOTES to Table 8 and Table 9 below), are compared with the MPEs in the Table.

[b]The left column is the averaging time for $\lvert E\rvert^2$, the right column is the averaging time for $\lvert H\rvert^2$. For frequencies greater than 400 MHz, the averaging time is for power density S

[c]These plane-wave equivalent power density values are commonly used as a convenient comparison with MPEs at higher frequencies and are displayed on some instruments in use.