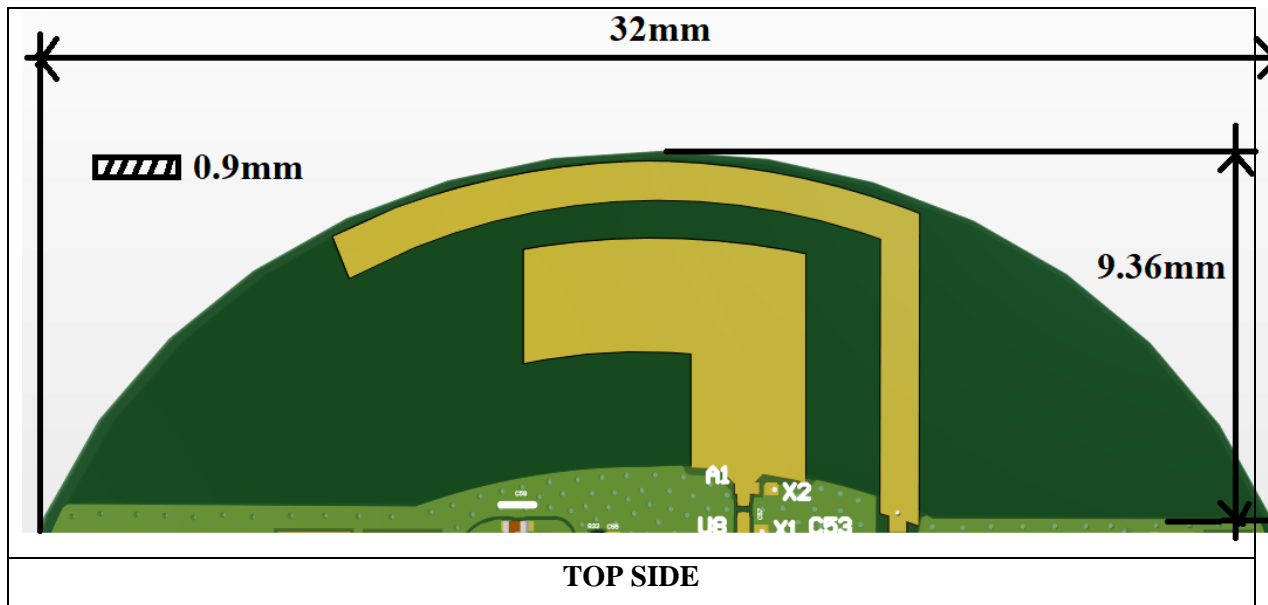


Antenna Information

Manufacturer	HID Global
Antenna Type	Embedded
Antenna Model	Dual Element Coupled
Antenna Part Number	N/A
Antenna Frequency Range	2402-2482MHz 5150-5895MHz
Antenna Input Power Limitation	3 Watt
Antenna Peak Gain	3dbi 2.5dbi
Antenna Dimensions (LxHxW)	32mm x 9.36mm x 0.9mm

Antenna Photo



2.4GHz Band

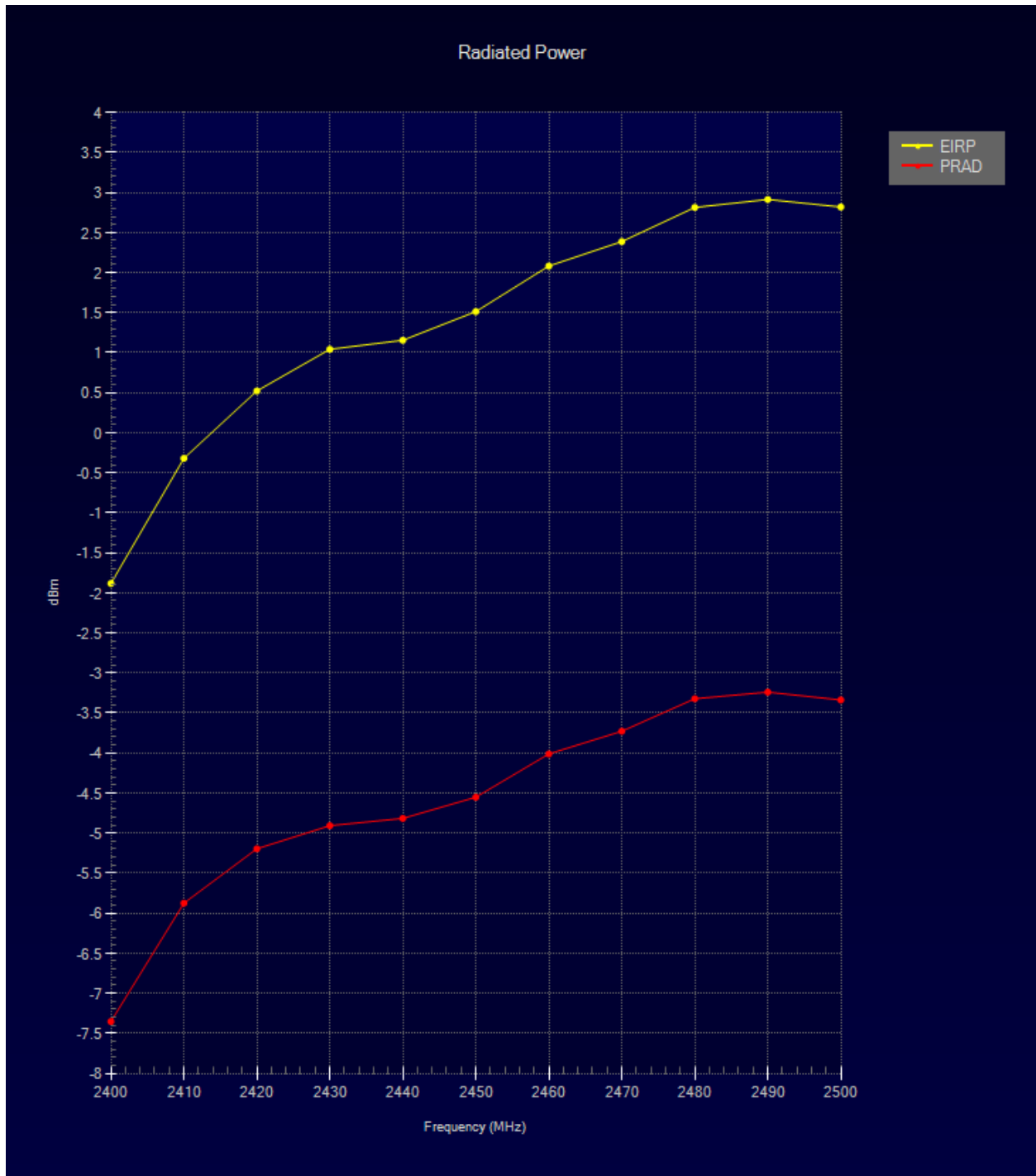


Figure 1 : Radiated Power Chart

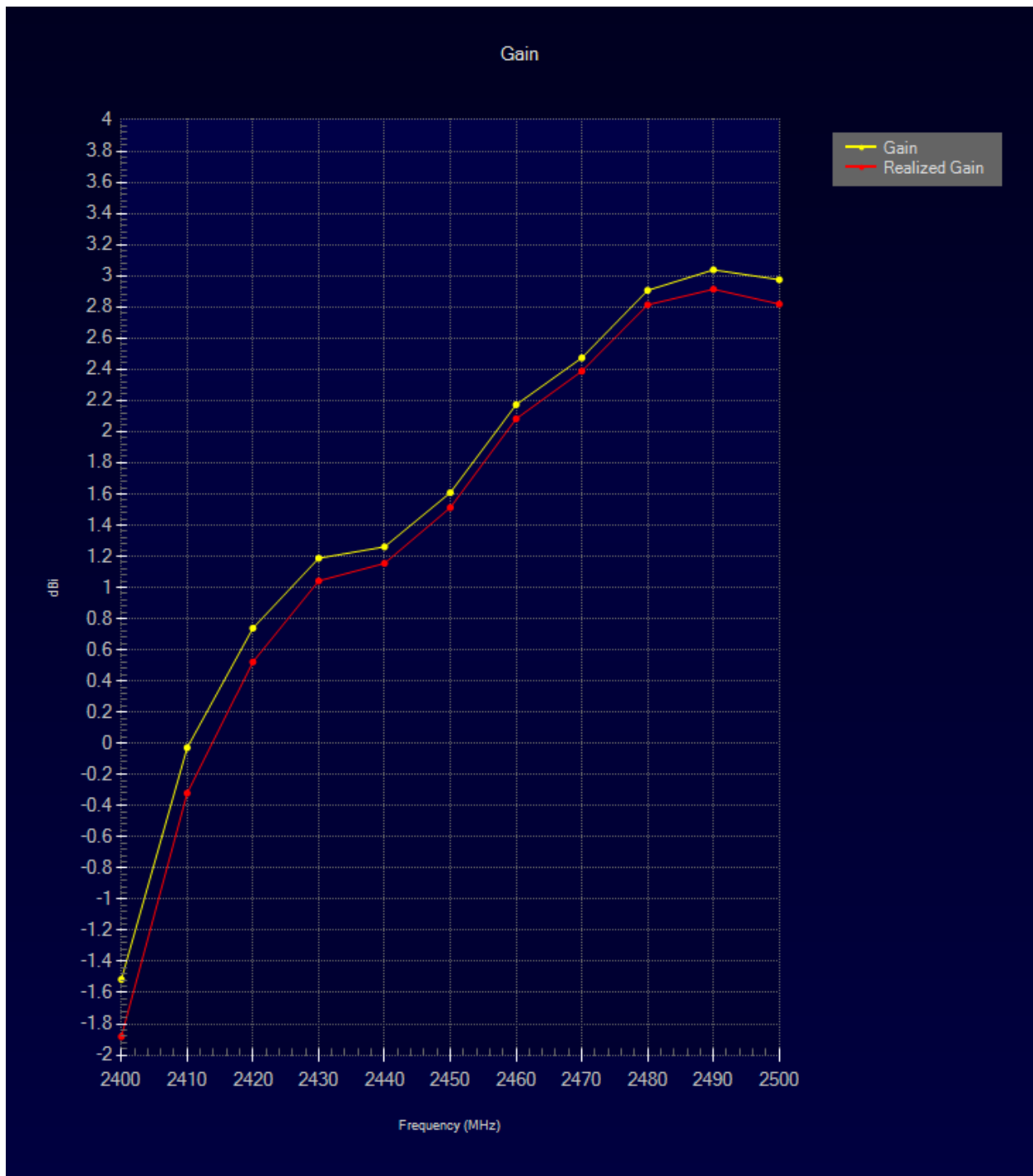


Figure 2 : Gain Chart

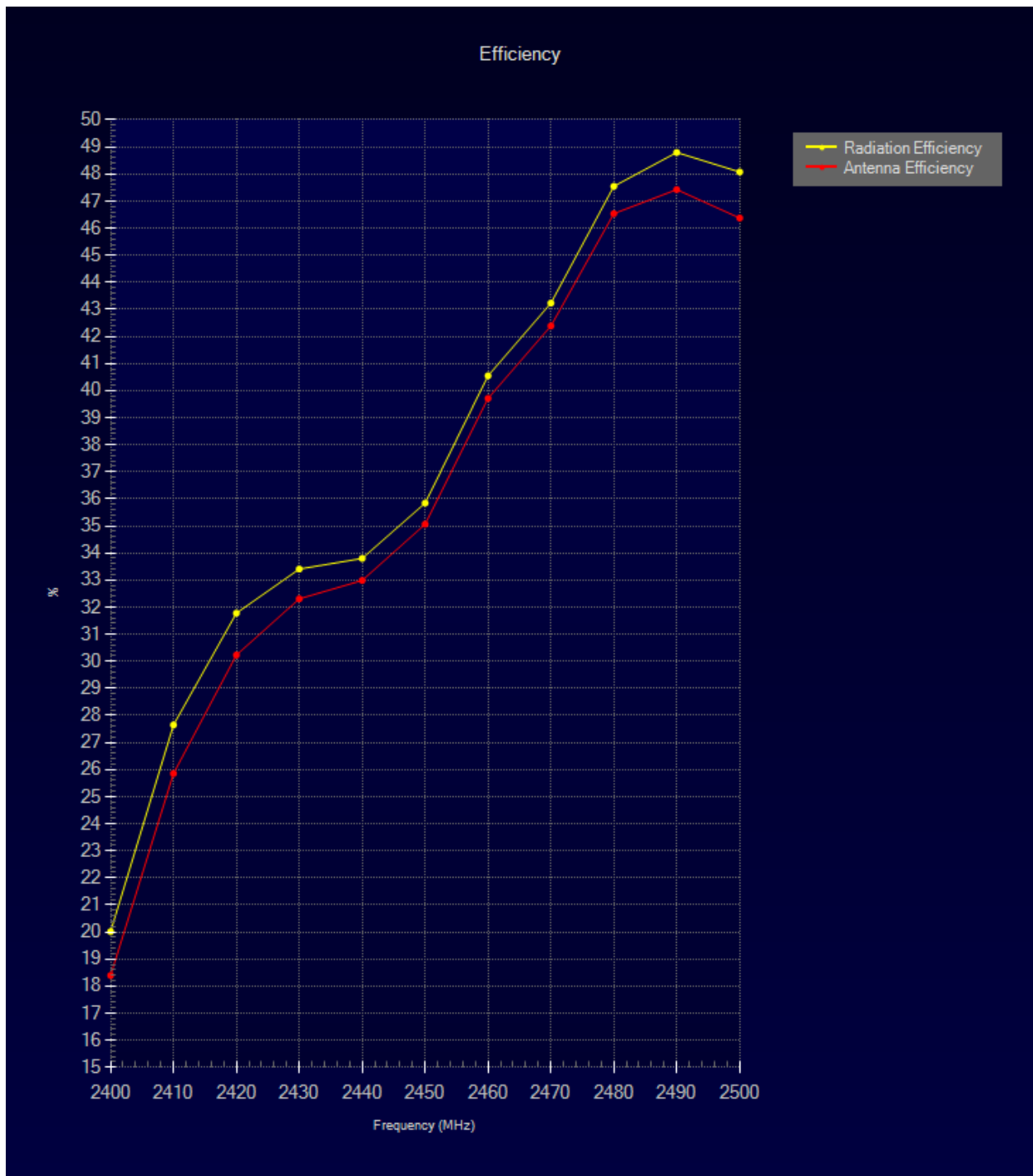


Figure 3 : Efficiency Chart

Frequency (MHz)	Antenna Efficiency (%)	Radiation Efficiency (%)	Gain (dBi)	Realized Gain (dBi)	PRAD (dBm)	EIRP (dBm)
2500.00	46.38	48.08	2.98	2.82	-3.34	2.82

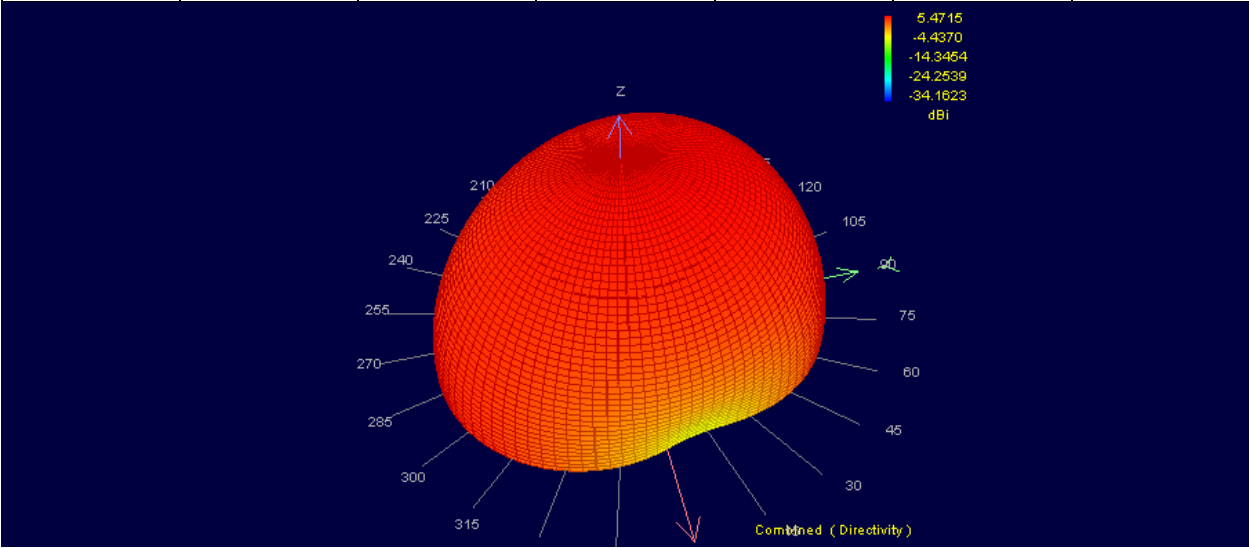


Figure 4 : 3D Far-Field Combined

Frequency (MHz)	Antenna Efficiency (%)	Radiation Efficiency (%)	Gain (dBi)	Realized Gain (dBi)	PRAD (dBm)	EIRP (dBm)
2400.00	18.39	20.02	-1.51	-1.88	-7.35	-1.88

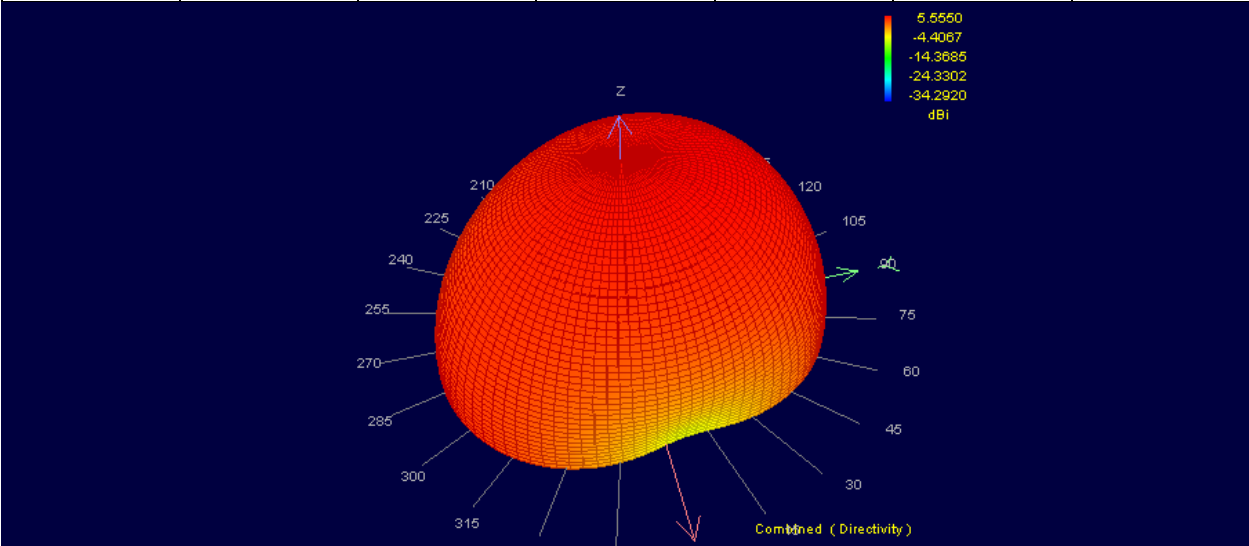


Figure 5 : 3D Far-Field Combined

Frequency (MHz)	Antenna Efficiency (%)	Radiation Efficiency (%)	Gain (dBi)	Realized Gain (dBi)	PRAD (dBm)	EIRP (dBm)
2410.00	25.85	27.65	-0.03	-0.32	-5.87	-0.32

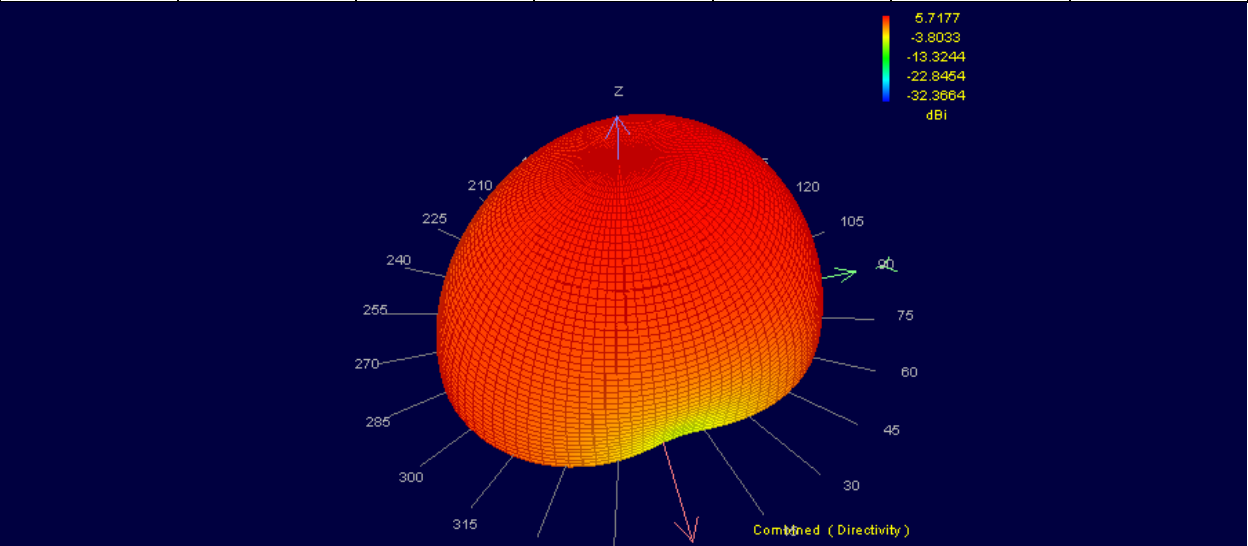


Figure 6 : 3D Far-Field Combined

Frequency (MHz)	Antenna Efficiency (%)	Radiation Efficiency (%)	Gain (dBi)	Realized Gain (dBi)	PRAD (dBm)	EIRP (dBm)
2420.00	30.23	31.78	0.74	0.52	-5.20	0.52

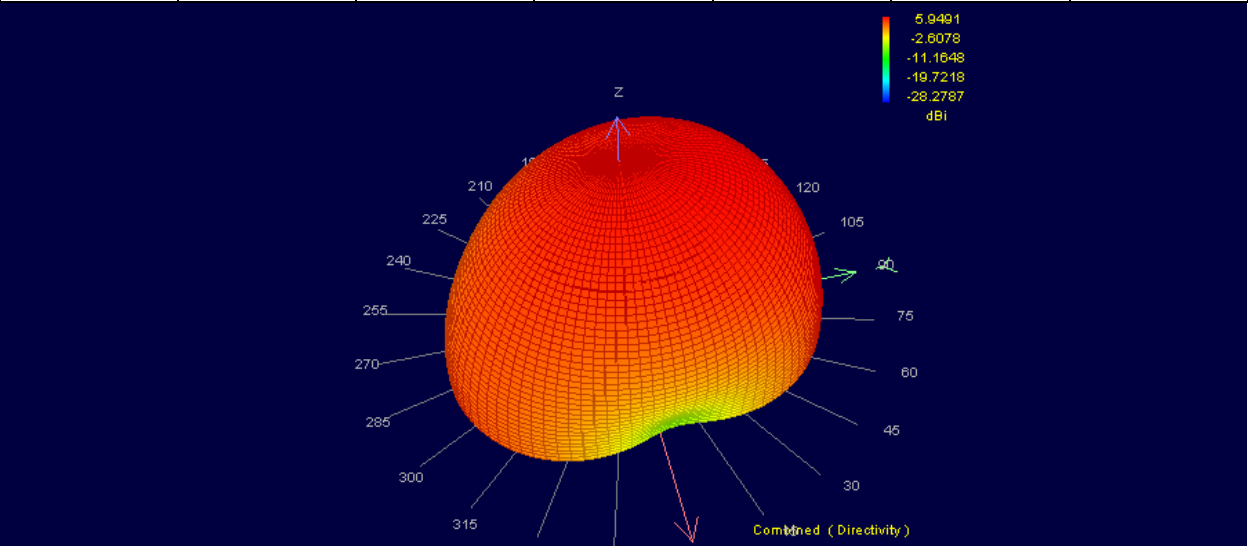


Figure 7 : 3D Far-Field Combined

Frequency (MHz)	Antenna Efficiency (%)	Radiation Efficiency (%)	Gain (dBi)	Realized Gain (dBi)	PRAD (dBm)	EIRP (dBm)
2430.00	32.31	33.41	1.19	1.04	-4.91	1.04

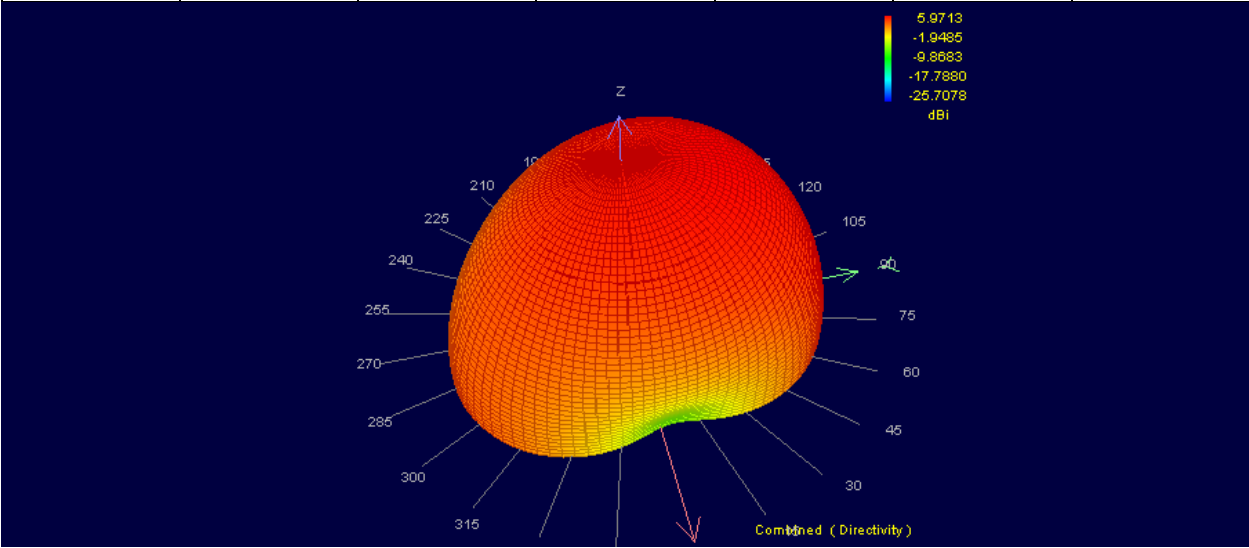


Figure 8 : 3D Far-Field Combined

Frequency (MHz)	Antenna Efficiency (%)	Radiation Efficiency (%)	Gain (dBi)	Realized Gain (dBi)	PRAD (dBm)	EIRP (dBm)
2440.00	32.99	33.80	1.26	1.15	-4.82	1.15

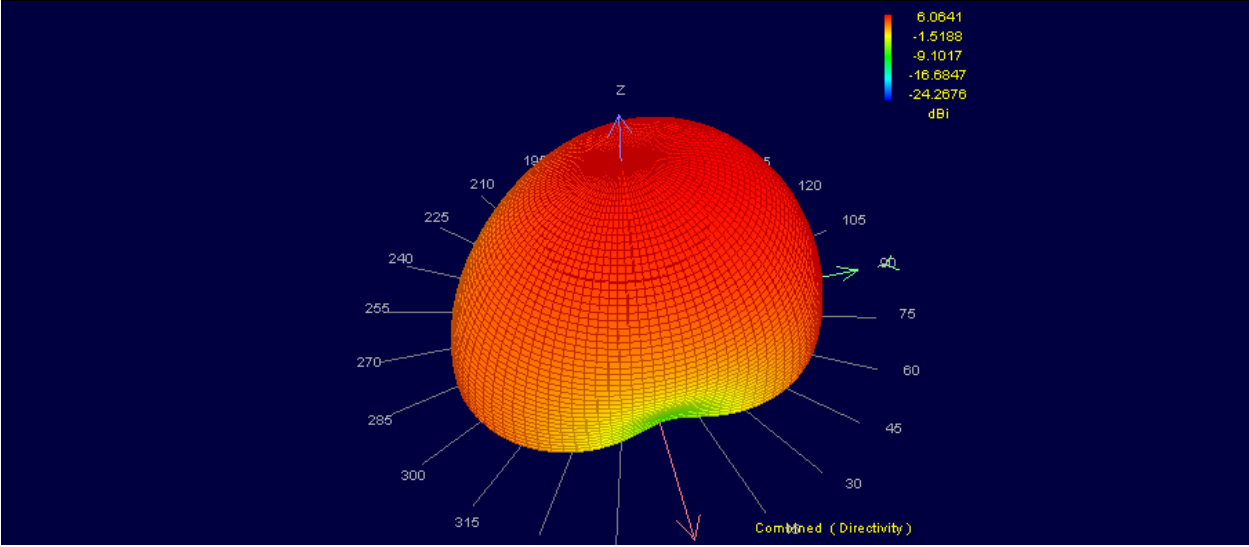


Figure 9 : 3D Far-Field Combined

Frequency (MHz)	Antenna Efficiency (%)	Radiation Efficiency (%)	Gain (dBi)	Realized Gain (dBi)	PRAD (dBm)	EIRP (dBm)
2450.00	35.06	35.85	1.61	1.51	-4.55	1.51

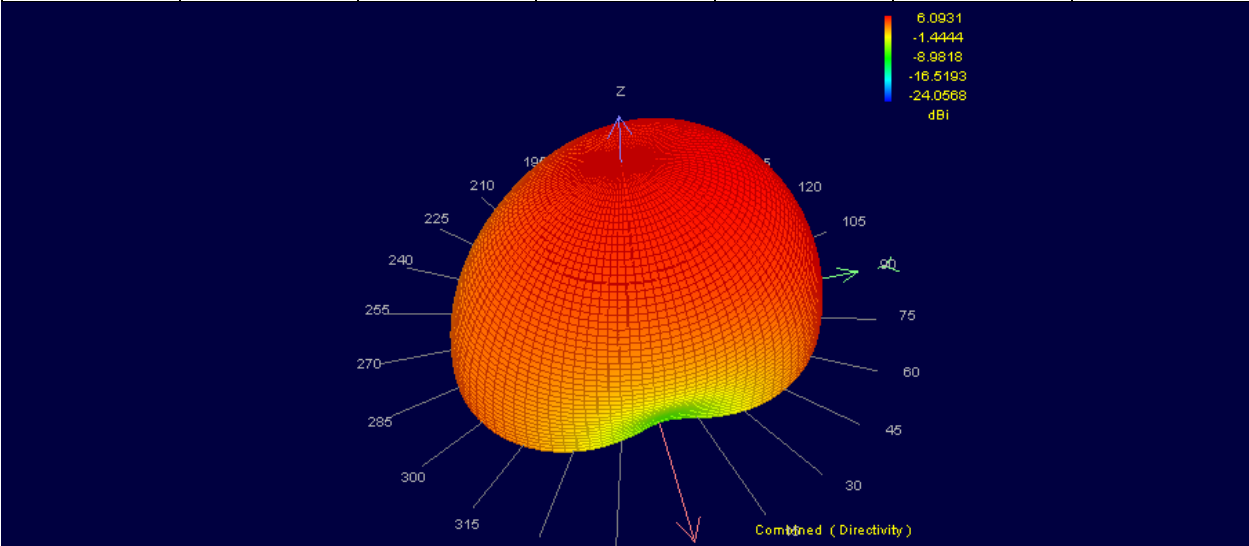


Figure 10 : 3D Far-Field Combined

Frequency (MHz)	Antenna Efficiency (%)	Radiation Efficiency (%)	Gain (dBi)	Realized Gain (dBi)	PRAD (dBm)	EIRP (dBm)
2460.00	39.71	40.55	2.17	2.08	-4.01	2.08

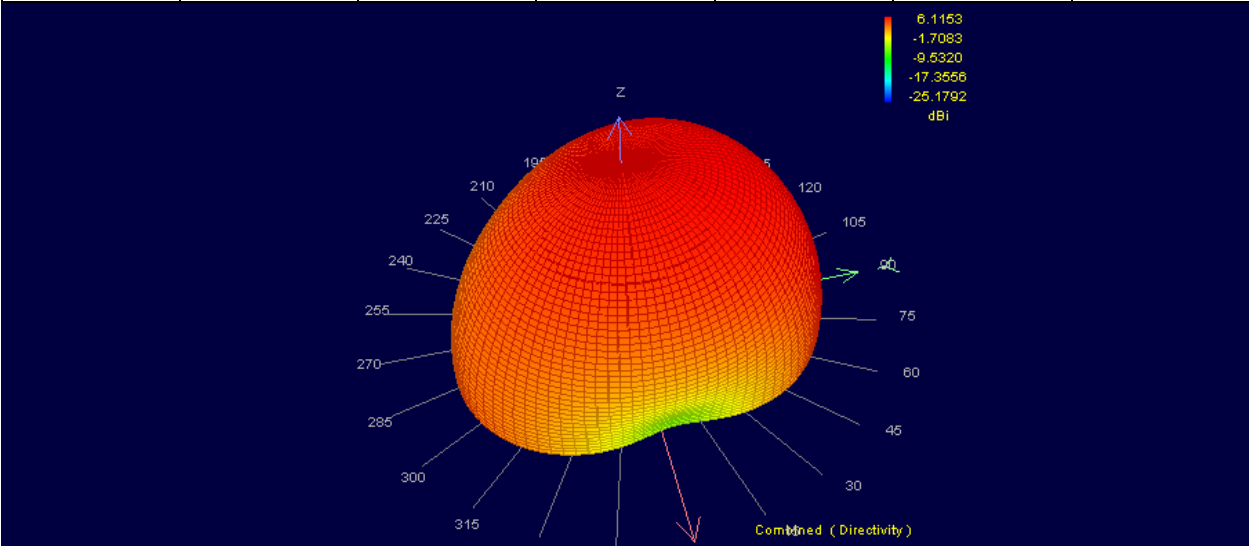


Figure 11 : 3D Far-Field Combined

Frequency (MHz)	Antenna Efficiency (%)	Radiation Efficiency (%)	Gain (dBi)	Realized Gain (dBi)	PRAD (dBm)	EIRP (dBm)
2470.00	42.39	43.23	2.47	2.39	-3.73	2.39

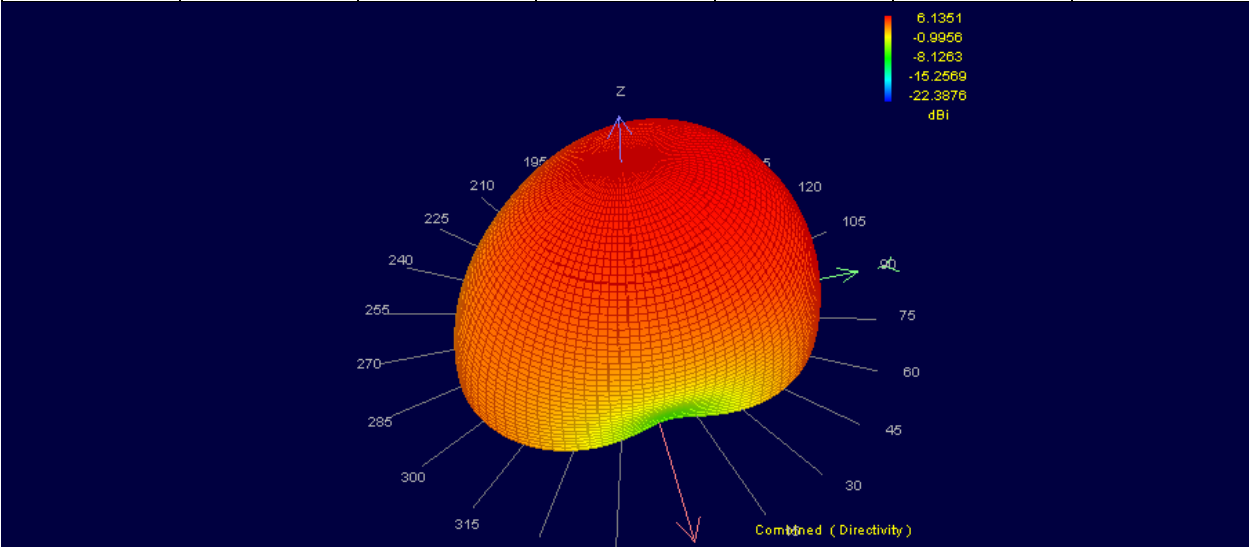


Figure 12 : 3D Far-Field Combined

Frequency (MHz)	Antenna Efficiency (%)	Radiation Efficiency (%)	Gain (dBi)	Realized Gain (dBi)	PRAD (dBm)	EIRP (dBm)
2480.00	46.54	47.55	2.91	2.81	-3.32	2.81

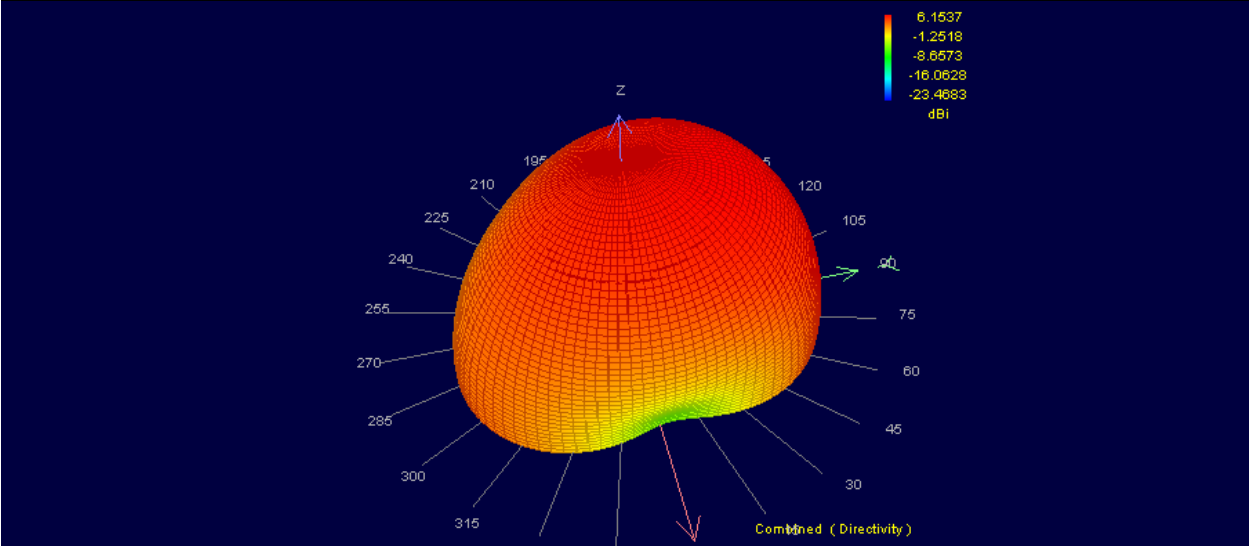


Figure 13 : 3D Far-Field Combined

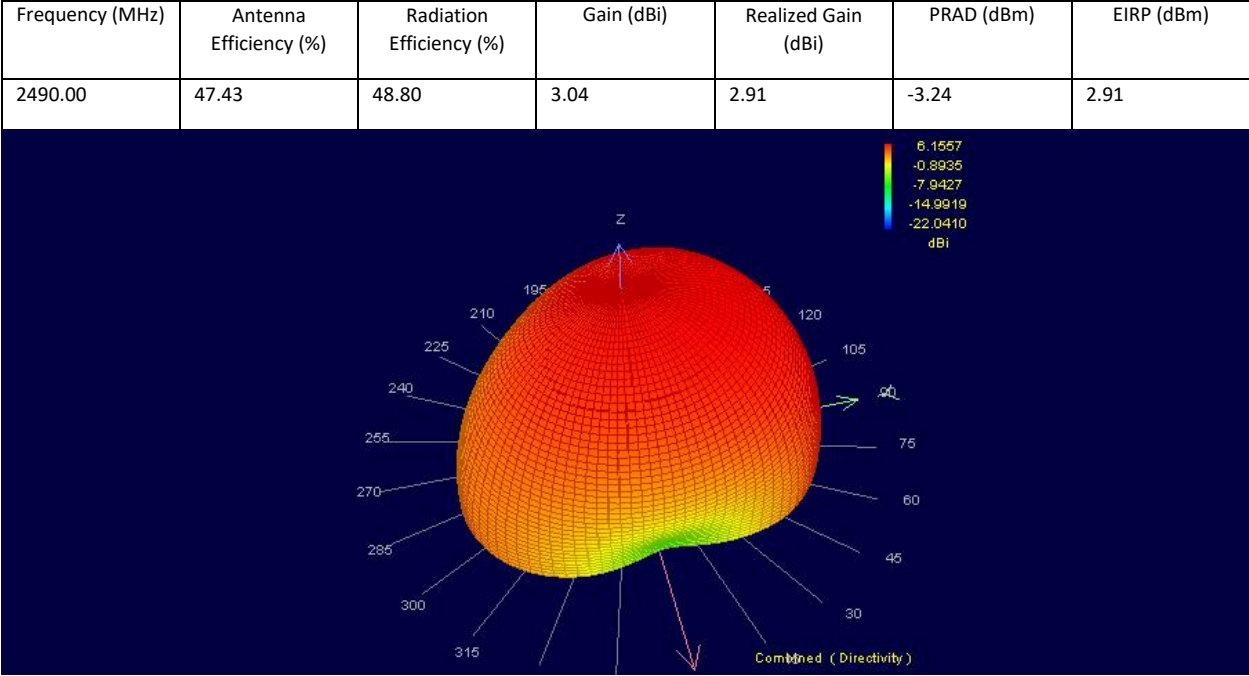


Figure 14 : 3D Far-Field Combined

5GHZ Band

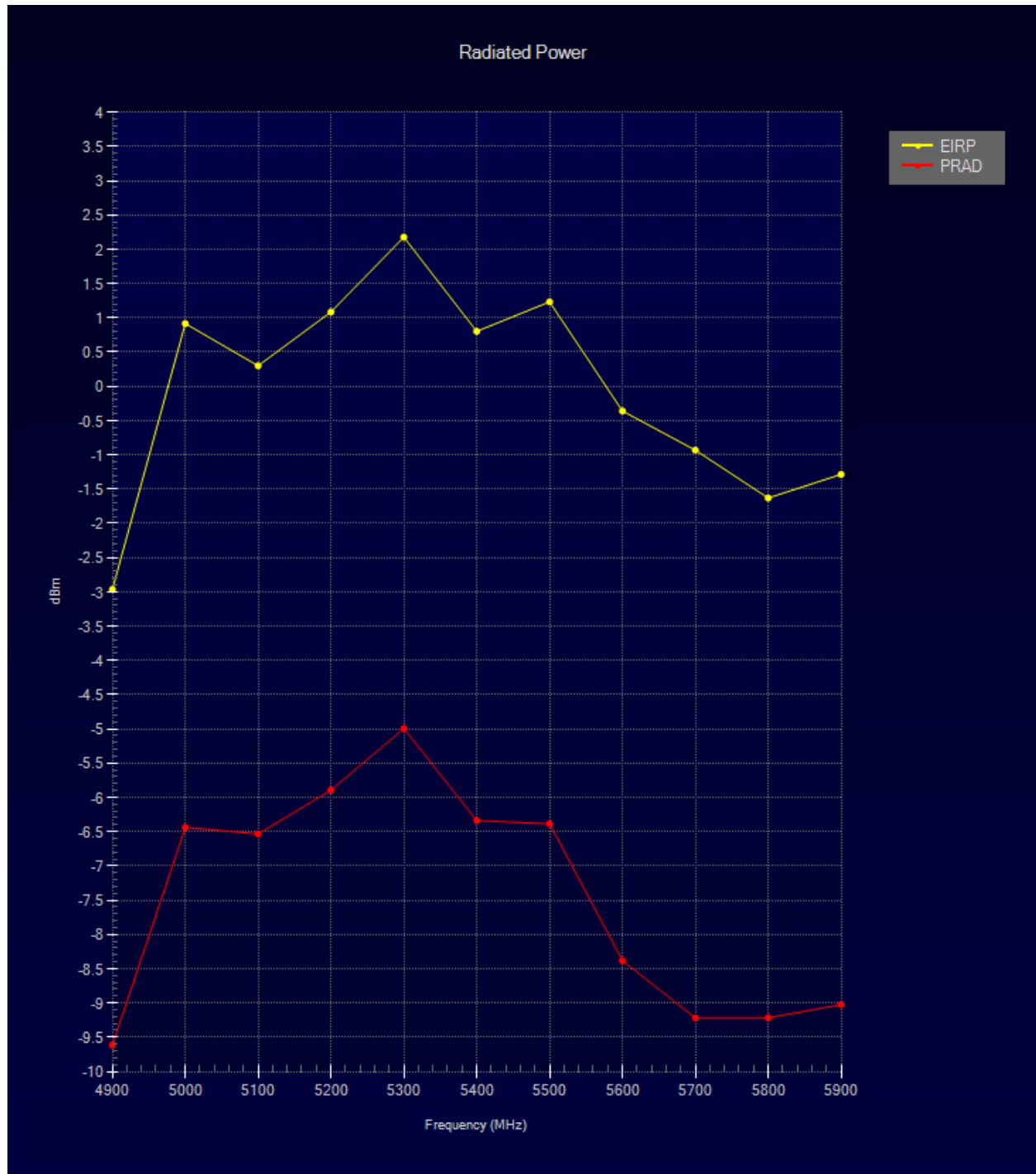


Figure 15 : Radiated Power Chart

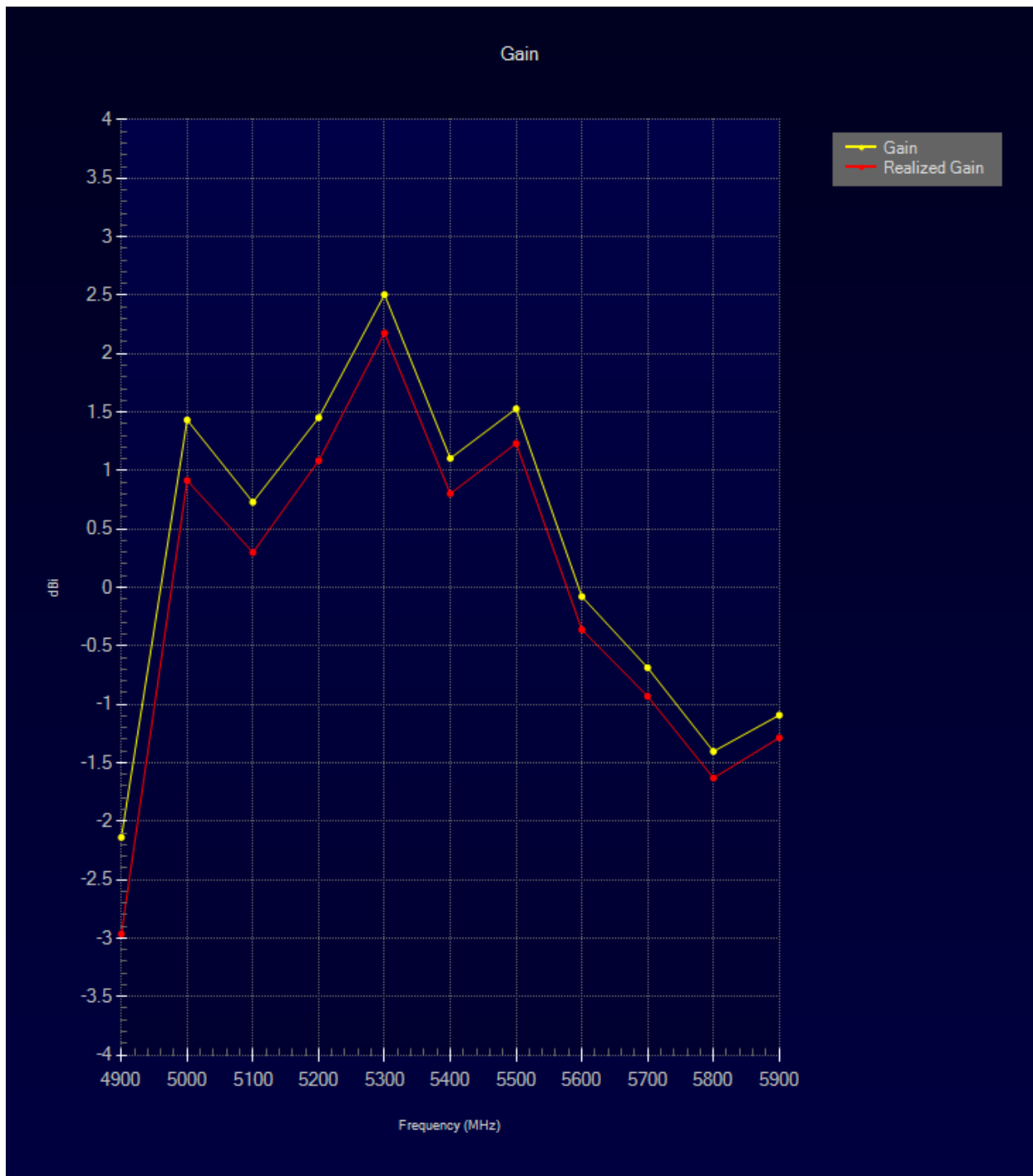


Figure 16 : Gain Chart

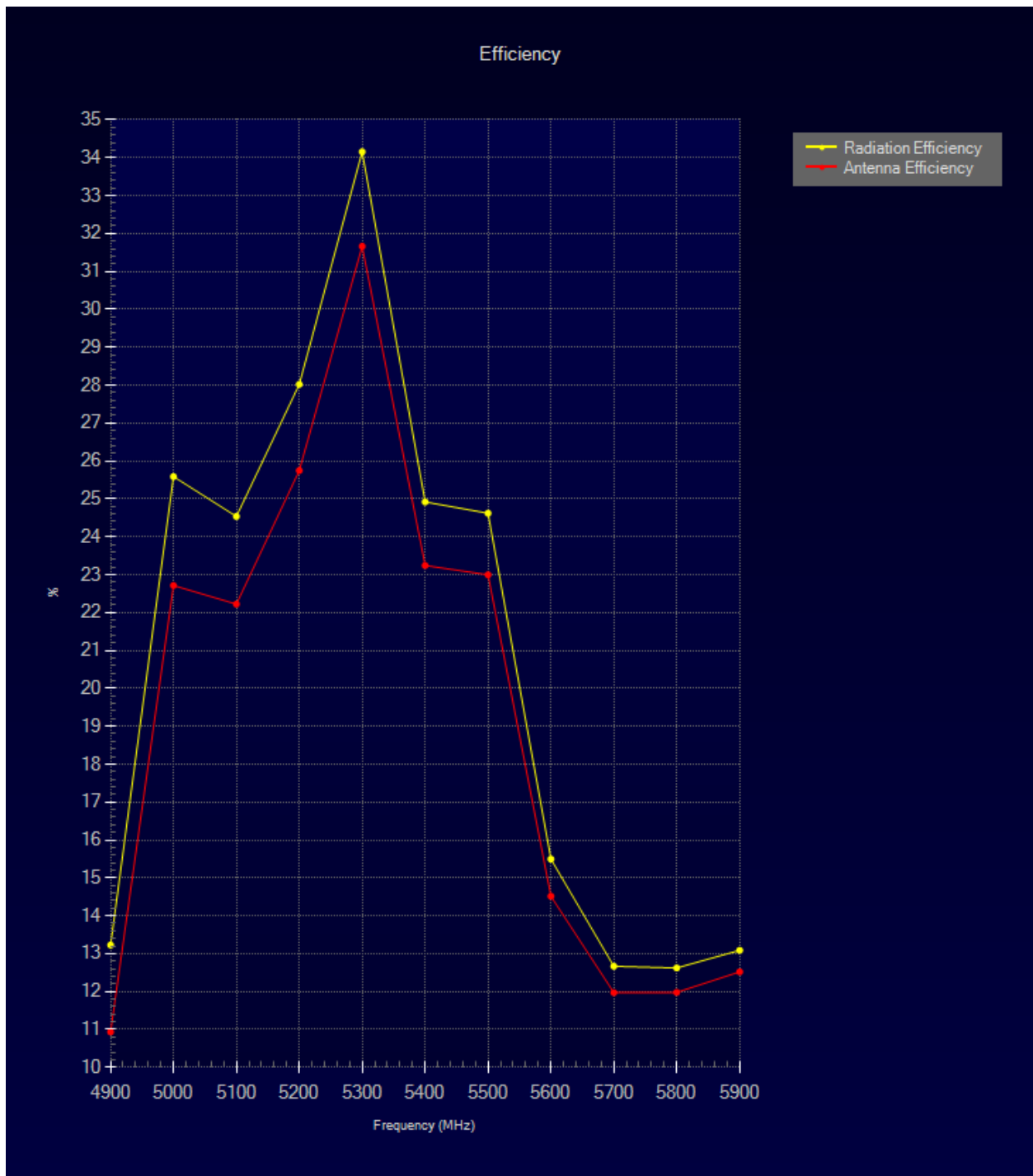


Figure 17 : Efficiency Chart

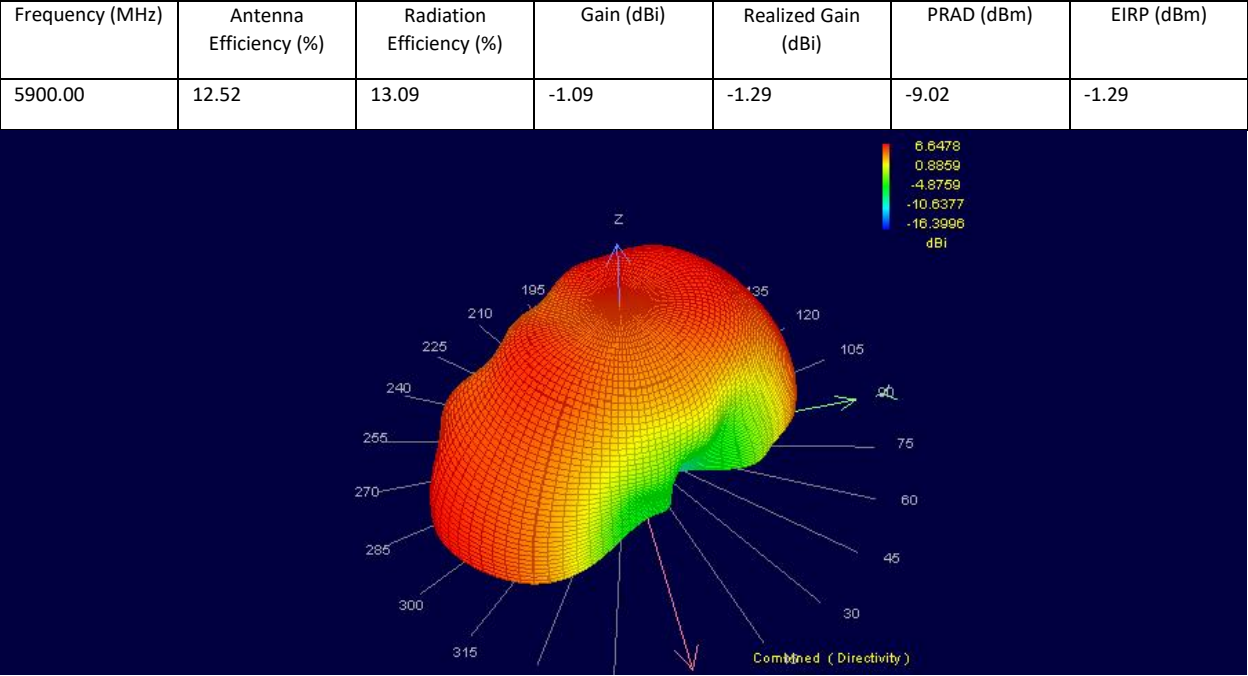


Figure 18 : 3D Far-Field Combined

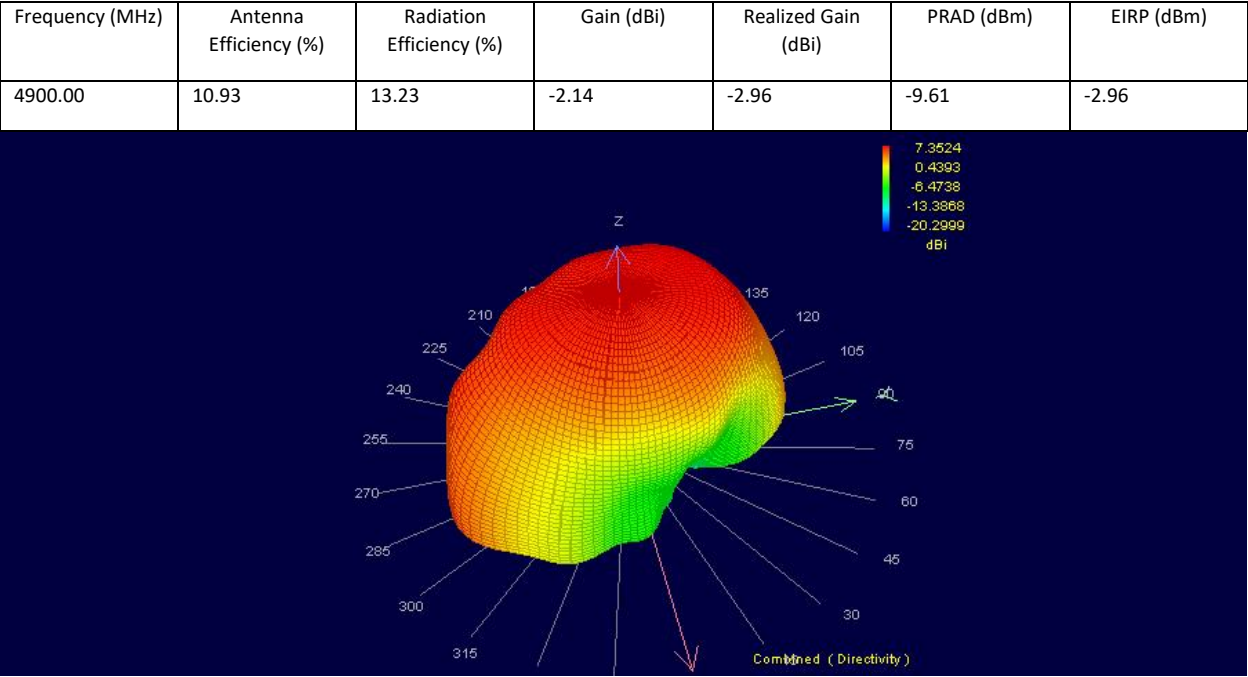


Figure 19 : 3D Far-Field Combined

Frequency (MHz)	Antenna Efficiency (%)	Radiation Efficiency (%)	Gain (dBi)	Realized Gain (dBi)	PRAD (dBm)	EIRP (dBm)
5000.00	22.72	25.59	1.43	0.92	-6.44	0.92

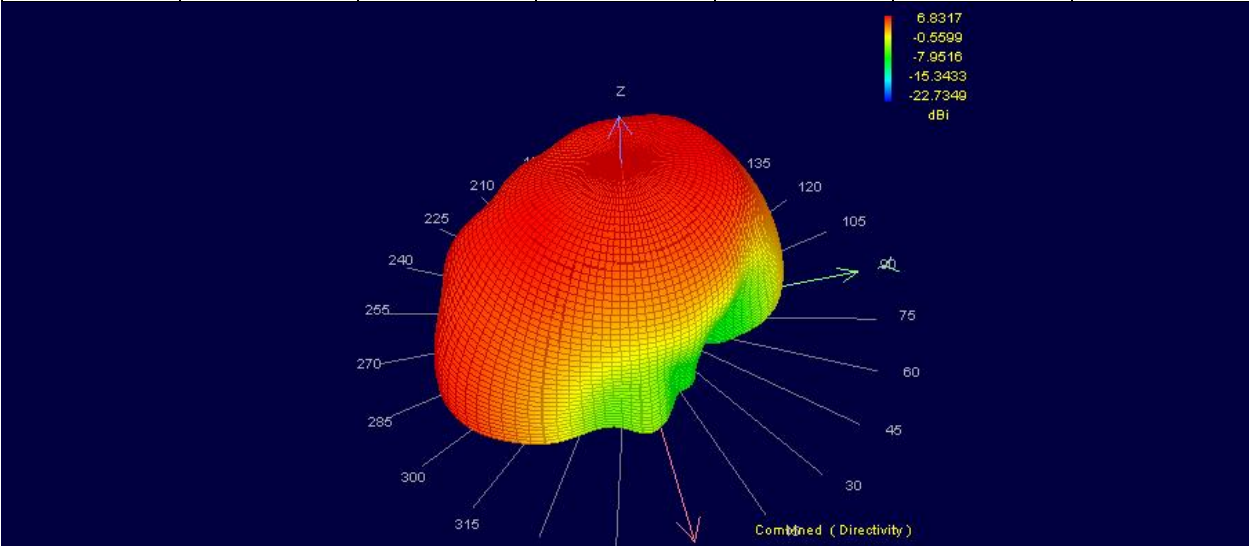


Figure 20 : 3D Far-Field Combined

Frequency (MHz)	Antenna Efficiency (%)	Radiation Efficiency (%)	Gain (dBi)	Realized Gain (dBi)	PRAD (dBm)	EIRP (dBm)
5100.00	22.22	24.54	0.73	0.30	-6.53	0.30

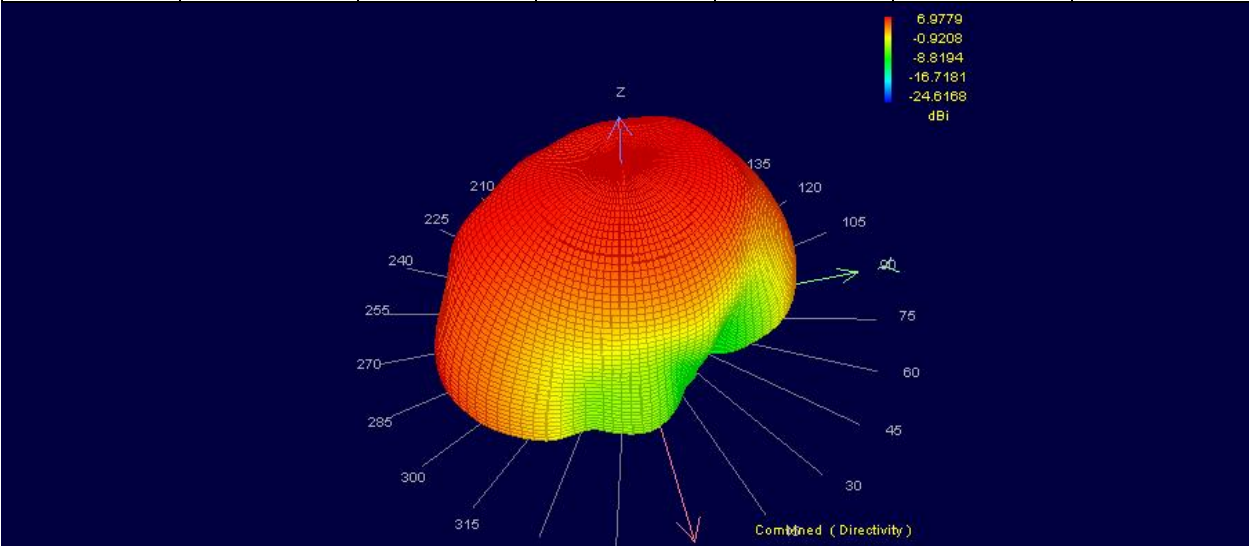


Figure 21 : 3D Far-Field Combined

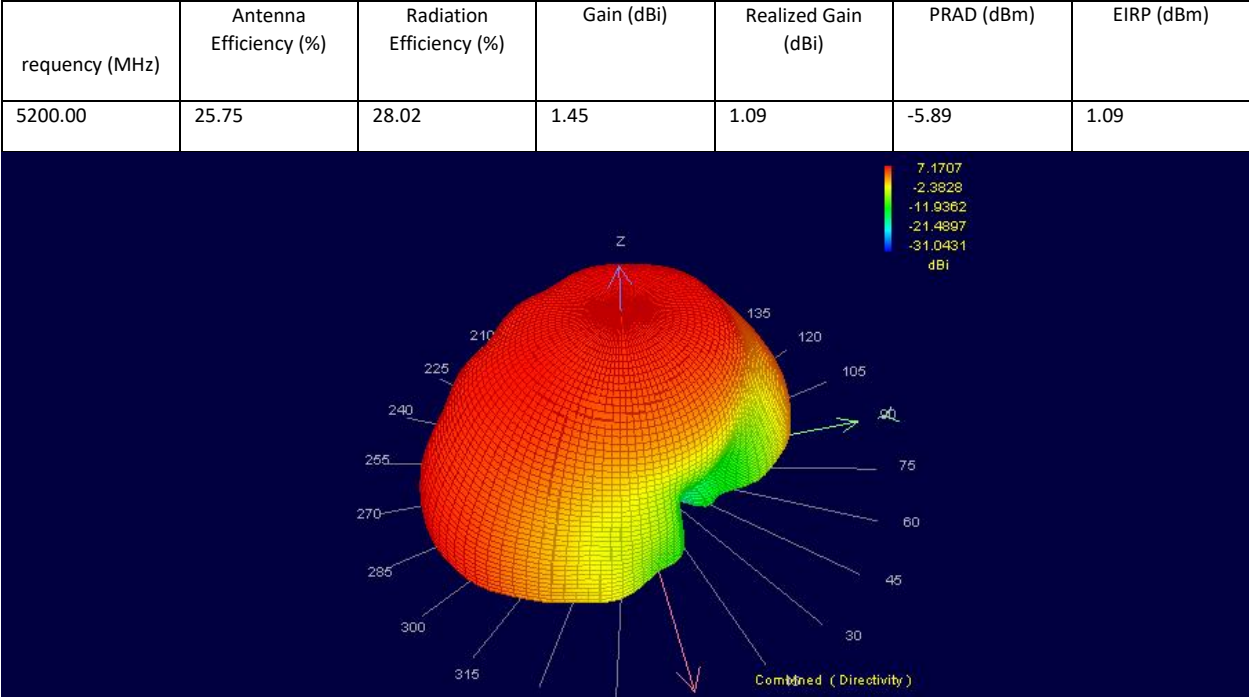


Figure 22 : 3D Far-Field Combined

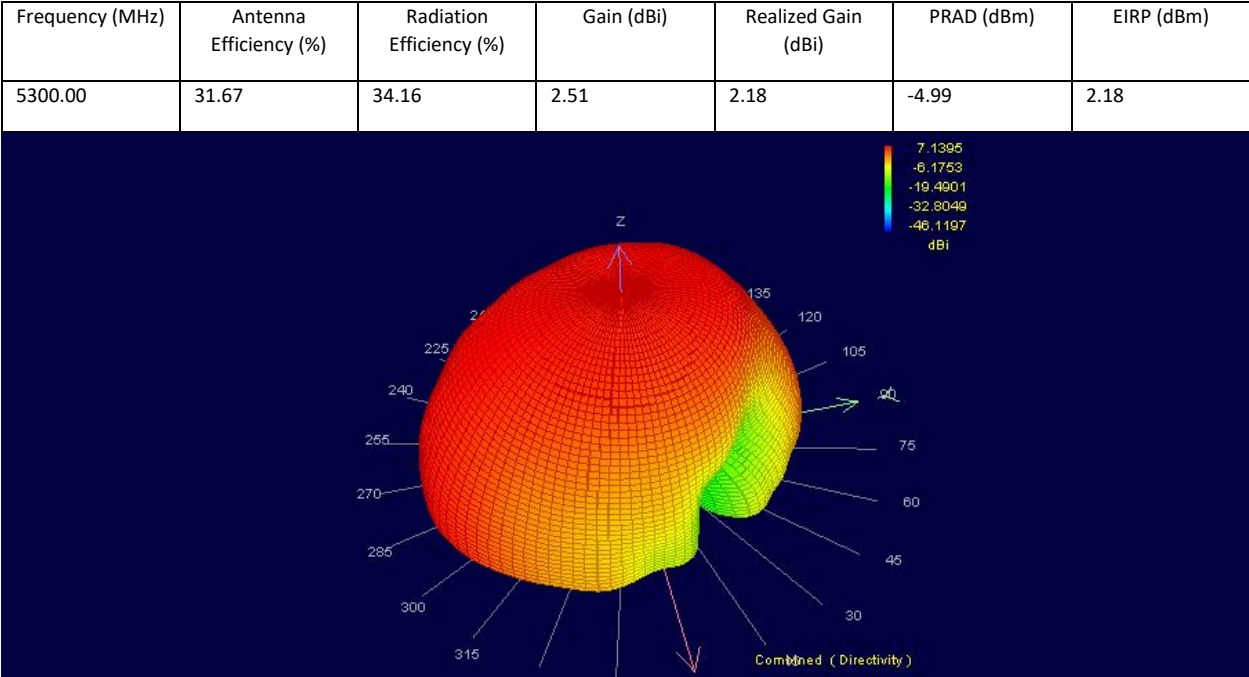


Figure 23 : 3D Far-Field Combined

Frequency (MHz)	Antenna Efficiency (%)	Radiation Efficiency (%)	Gain (dBi)	Realized Gain (dBi)	PRAD (dBm)	EIRP (dBm)
5400.00	23.24	24.92	1.10	0.80	-6.34	0.80

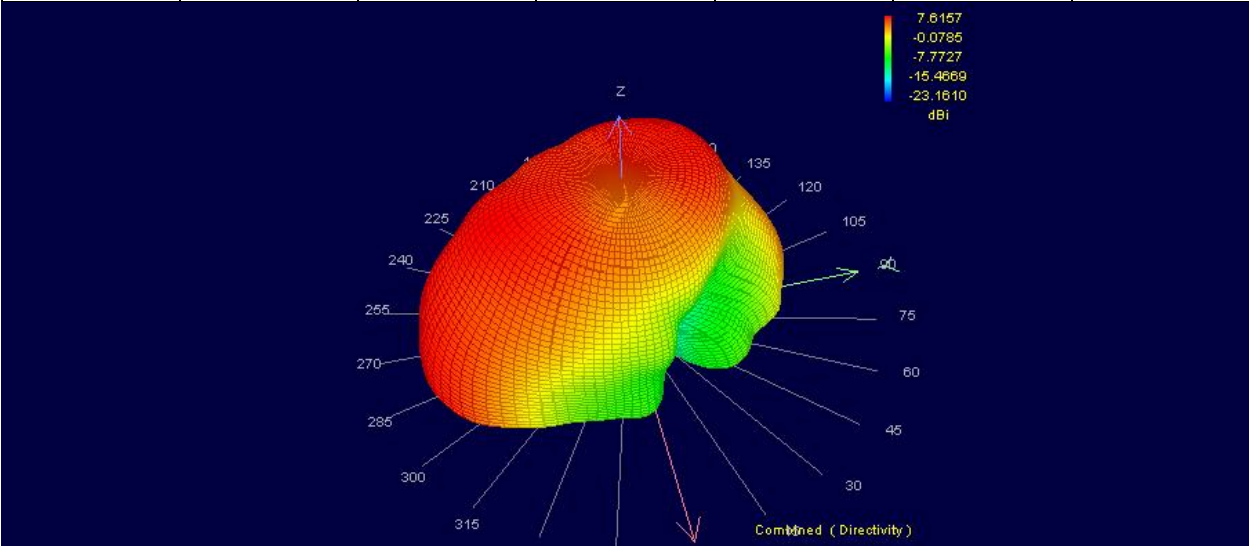


Figure 24 : 3D Far-Field Combined

Frequency (MHz)	Antenna Efficiency (%)	Radiation Efficiency (%)	Gain (dBi)	Realized Gain (dBi)	PRAD (dBm)	EIRP (dBm)
5500.00	23.00	24.62	1.53	1.23	-6.38	1.23

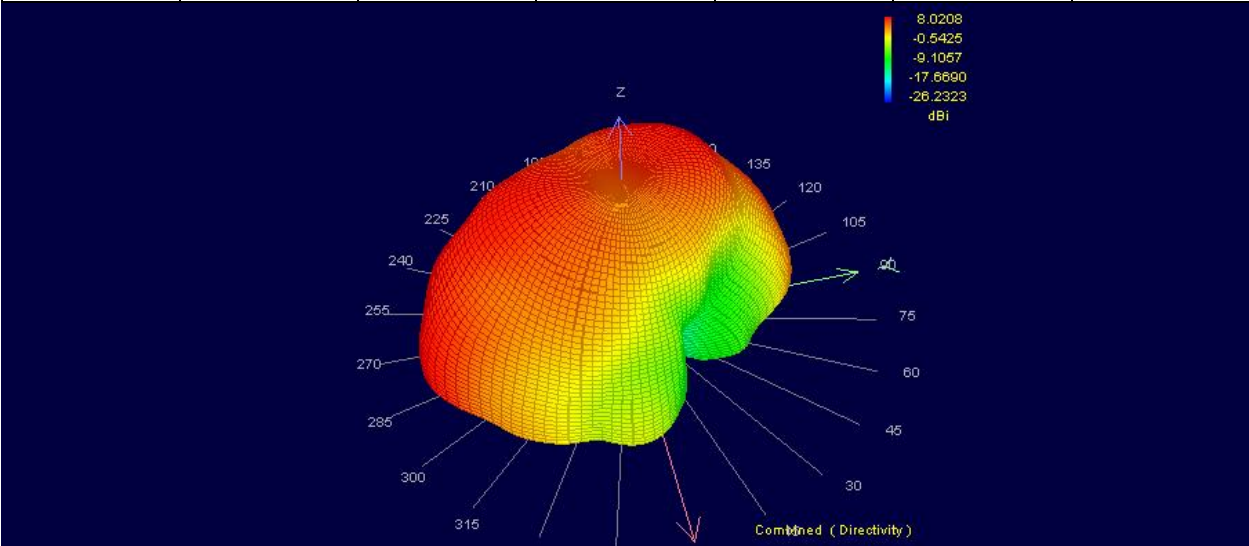


Figure 25 : 3D Far-Field Combined

Frequency (MHz)	Antenna Efficiency (%)	Radiation Efficiency (%)	Gain (dBi)	Realized Gain (dBi)	PRAD (dBm)	EIRP (dBm)
5600.00	14.52	15.49	-0.08	-0.36	-8.38	-0.36

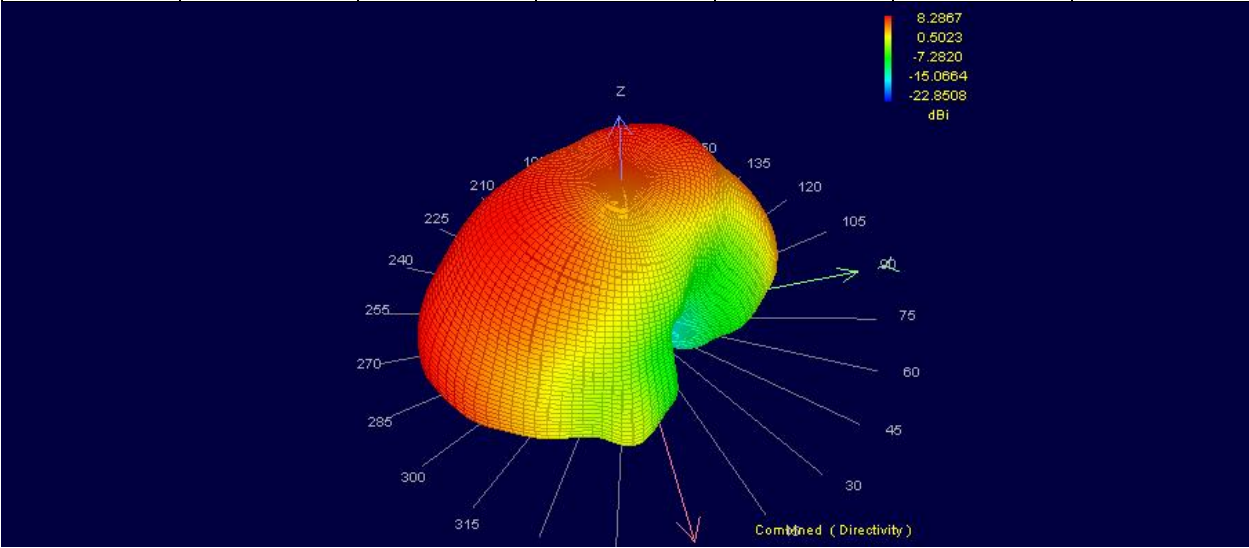


Figure 26 : 3D Far-Field Combined

Frequency (MHz)	Antenna Efficiency (%)	Radiation Efficiency (%)	Gain (dBi)	Realized Gain (dBi)	PRAD (dBm)	EIRP (dBm)
5700.00	11.97	12.67	-0.69	-0.93	-9.22	-0.93

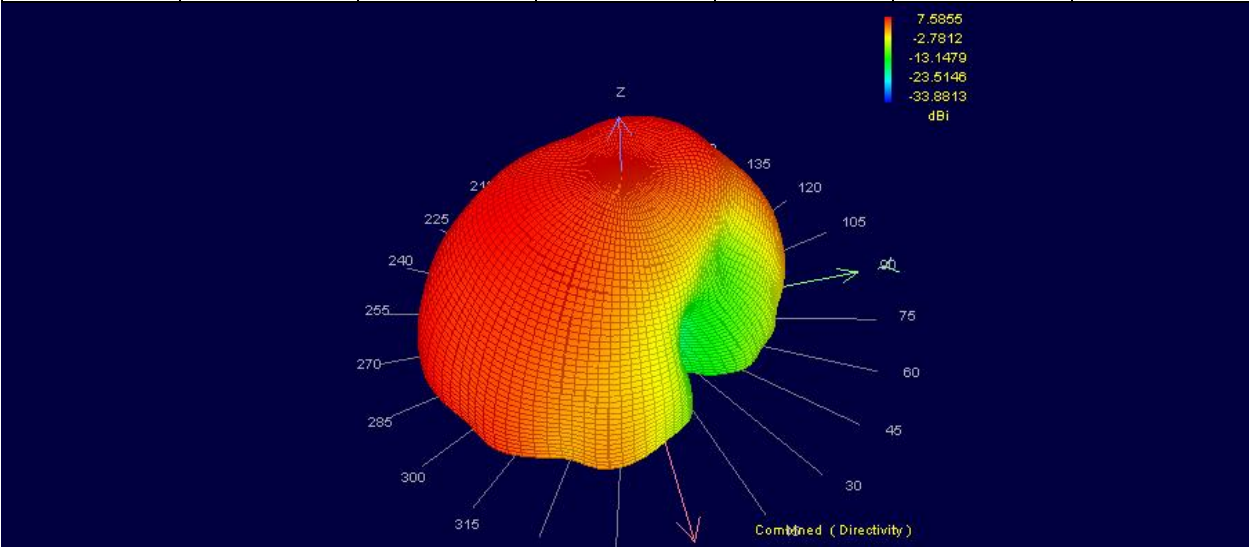


Figure 27 : 3D Far-Field Combined

Frequency (MHz)	Antenna Efficiency (%)	Radiation Efficiency (%)	Gain (dBi)	Realized Gain (dBi)	PRAD (dBm)	EIRP (dBm)
5800.00	11.98	12.62	-1.40	-1.63	-9.22	-1.63

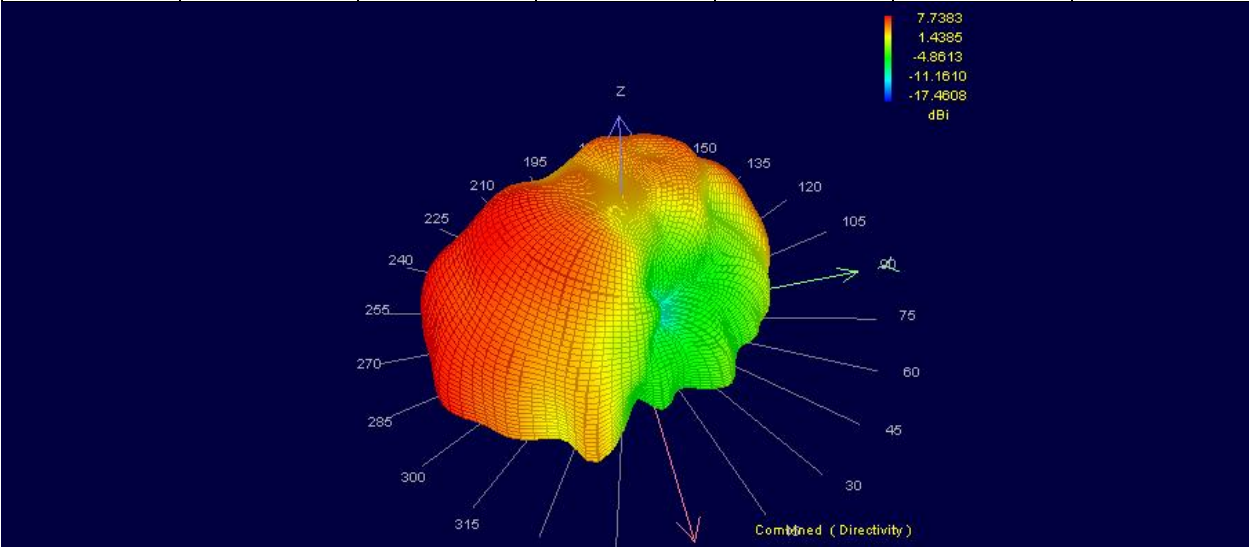


Figure 28 : 3D Far-Field Combined