

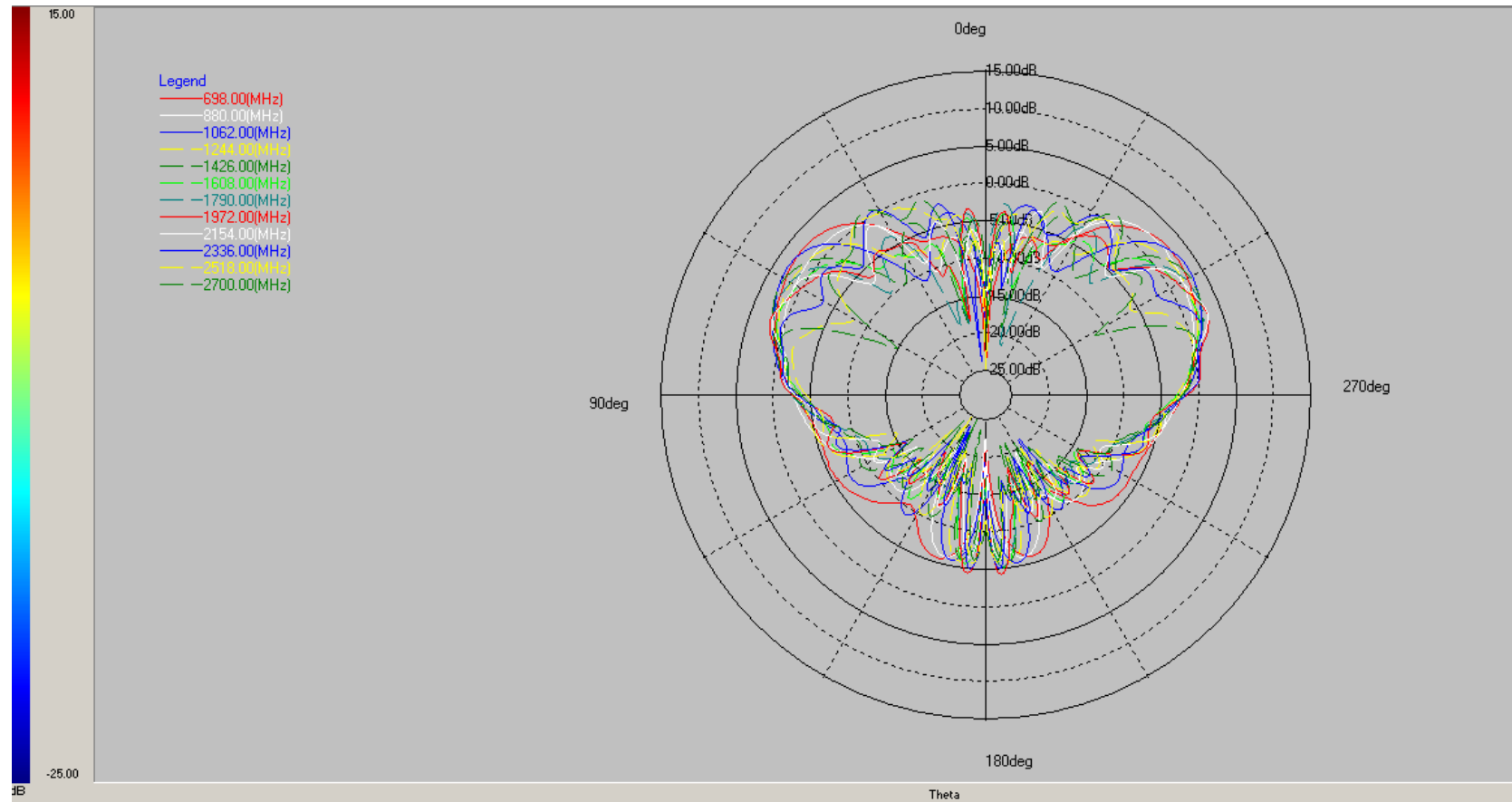


BMLPVMB/LTE RF Measurements

Date :7/23/2012

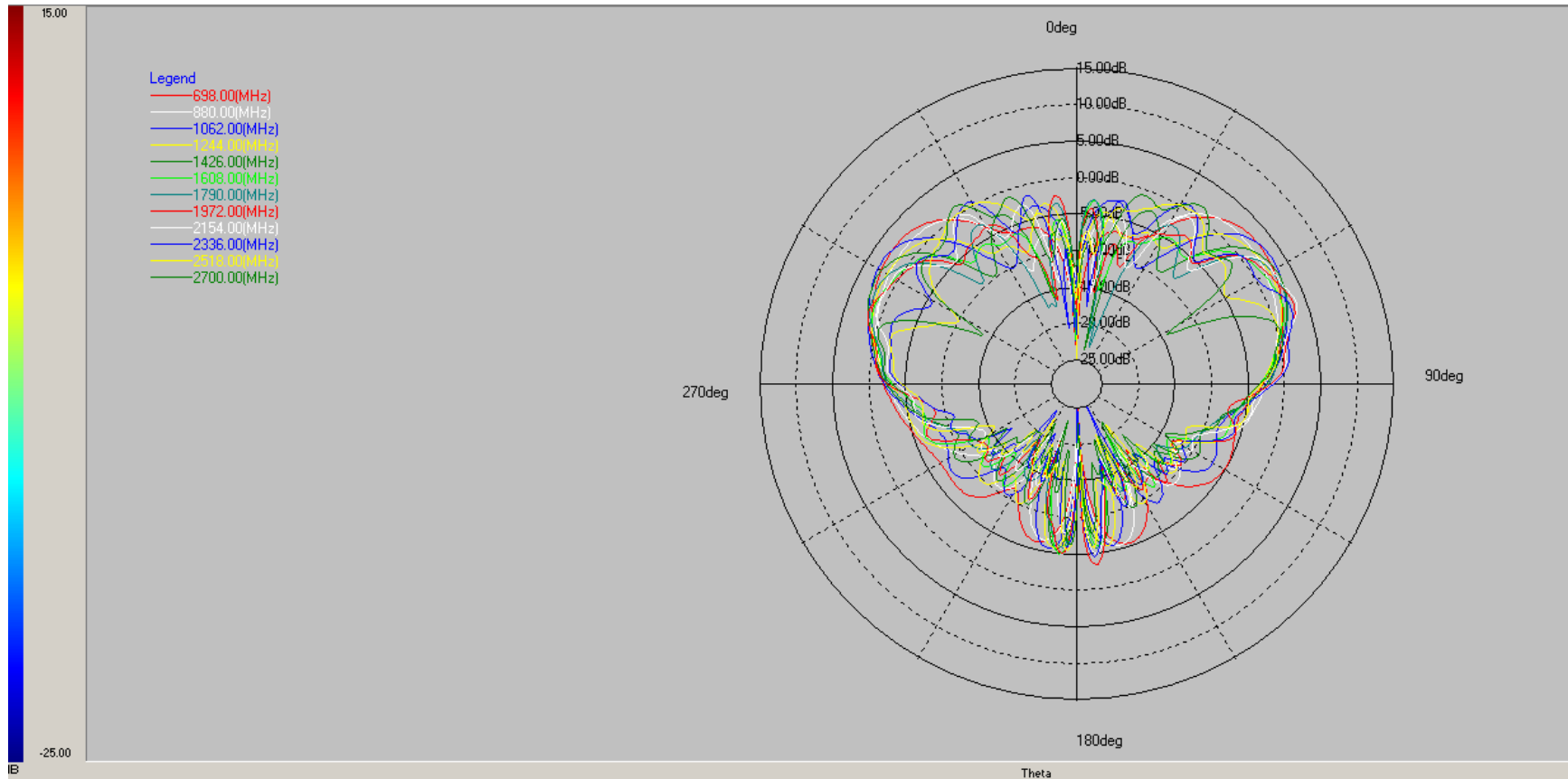
Set up: Measured on a 3-foot round ground plane on PCTEL's MLFPFP240PL15 high efficiency mount, with 15 feet PFP240 cable.

PHI = 0



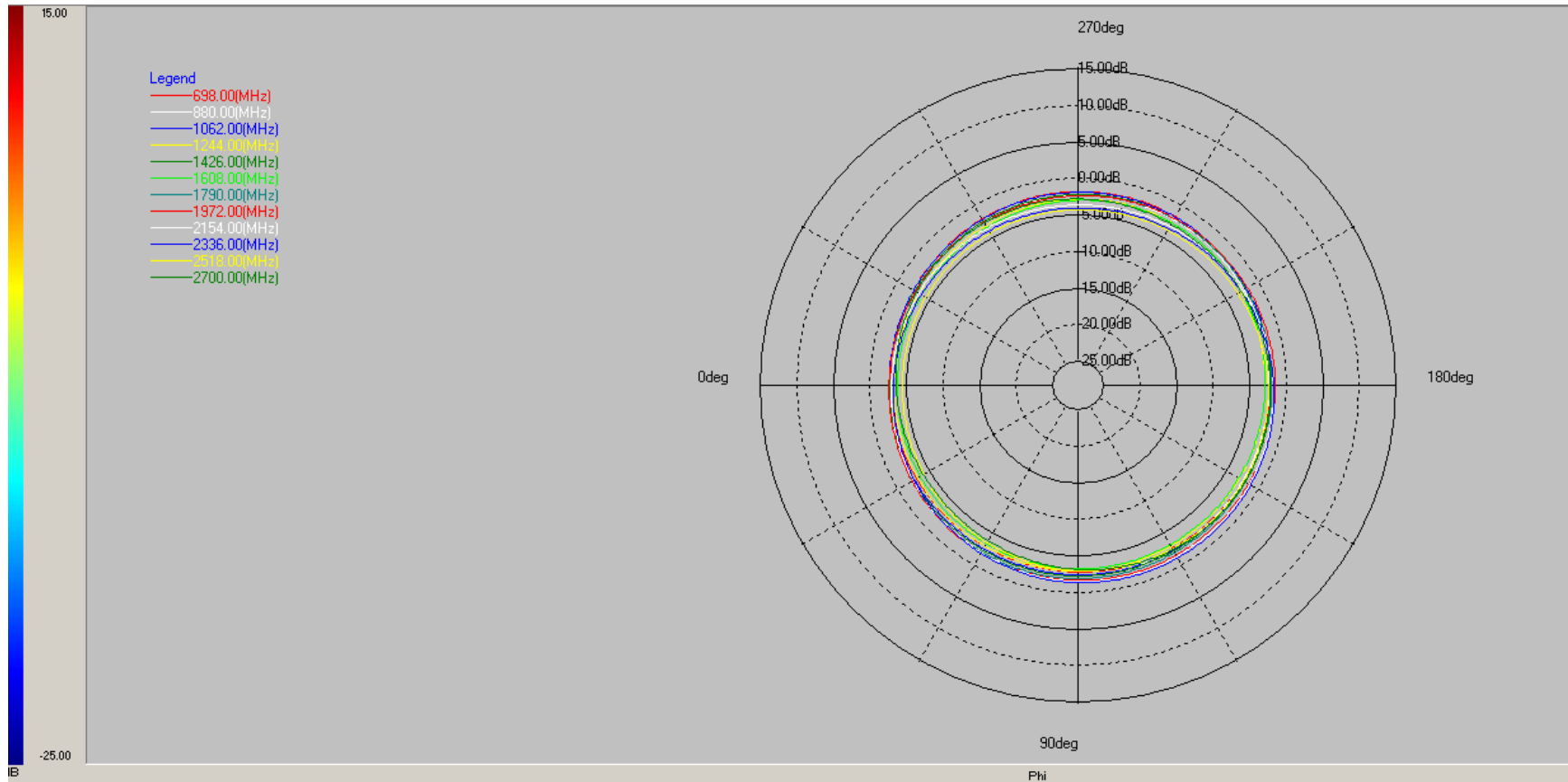
Layer	Max value	Position	Min val...	Position	Beam...	Max val...	Average	Standar...	Marker 1 pos	Marker 1 val...	Marker 2 pos	Marker 2 val...
698(MHz)	2.96 dB	-54.00 deg	-24.03 d...	0.00 deg	42.27 d...	26.99 dB	-3.54 dB	5.29	---	---	---	---
880(MHz)	2.34 dB	-50.00 deg	-22.53 d...	-180.00 ...	47.65 d...	24.87 dB	-4.43 dB	5.53	---	---	---	---
1062(MHz)	3.46 dB	-58.00 deg	-22.96 d...	156.00 d...	35.49 d...	26.42 dB	-4.24 dB	5.61	---	---	---	---
1244(MHz)	2.11 dB	-60.00 deg	-27.14 dB	0.00 deg	40.41 deg	29.25 dB	-4.78 dB	5.50	---	---	---	---
1426(MHz)	3.13 dB	-62.00 deg	-21.44 dB	-164.00 ...	30.71 deg	24.56 dB	-5.27 dB	5.95	---	---	---	---
1608(MHz)	1.94 dB	-68.00 deg	-19.15 dB	150.00 d...	35.42 d...	21.09 dB	-5.73 dB	5.52	---	---	---	---
1790(MHz)	2.79 dB	-66.00 deg	-21.59 dB	-17.00 d...	27.26 d...	24.38 dB	-5.83 dB	6.19	---	---	---	---
1972(MHz)	3.08 dB	-70.00 deg	-19.49 dB	-180.00 ...	31.69 deg	22.57 dB	-5.46 dB	5.83	---	---	---	---
2154(MHz)	3.14 dB	-69.00 deg	-21.39 dB	151.00 d...	30.32 d...	24.53 dB	-5.46 dB	6.06	---	---	---	---
2336(MHz)	1.84 dB	-71.00 deg	-23.88 d...	7.00 deg	26.48 d...	25.72 dB	-5.55 dB	6.08	---	---	---	---
2518(MHz)	0.26 dB	36.00 deg	-27.03 d...	146.00 d...	23.76 d...	27.29 dB	-6.24 dB	6.01	---	---	---	---
2700(MHz)	1.15 dB	-36.00 deg	-26.07 d...	158.00 d...	11.97 deg	27.22 dB	-6.28 dB	6.61	---	---	---	---

PHI = 90



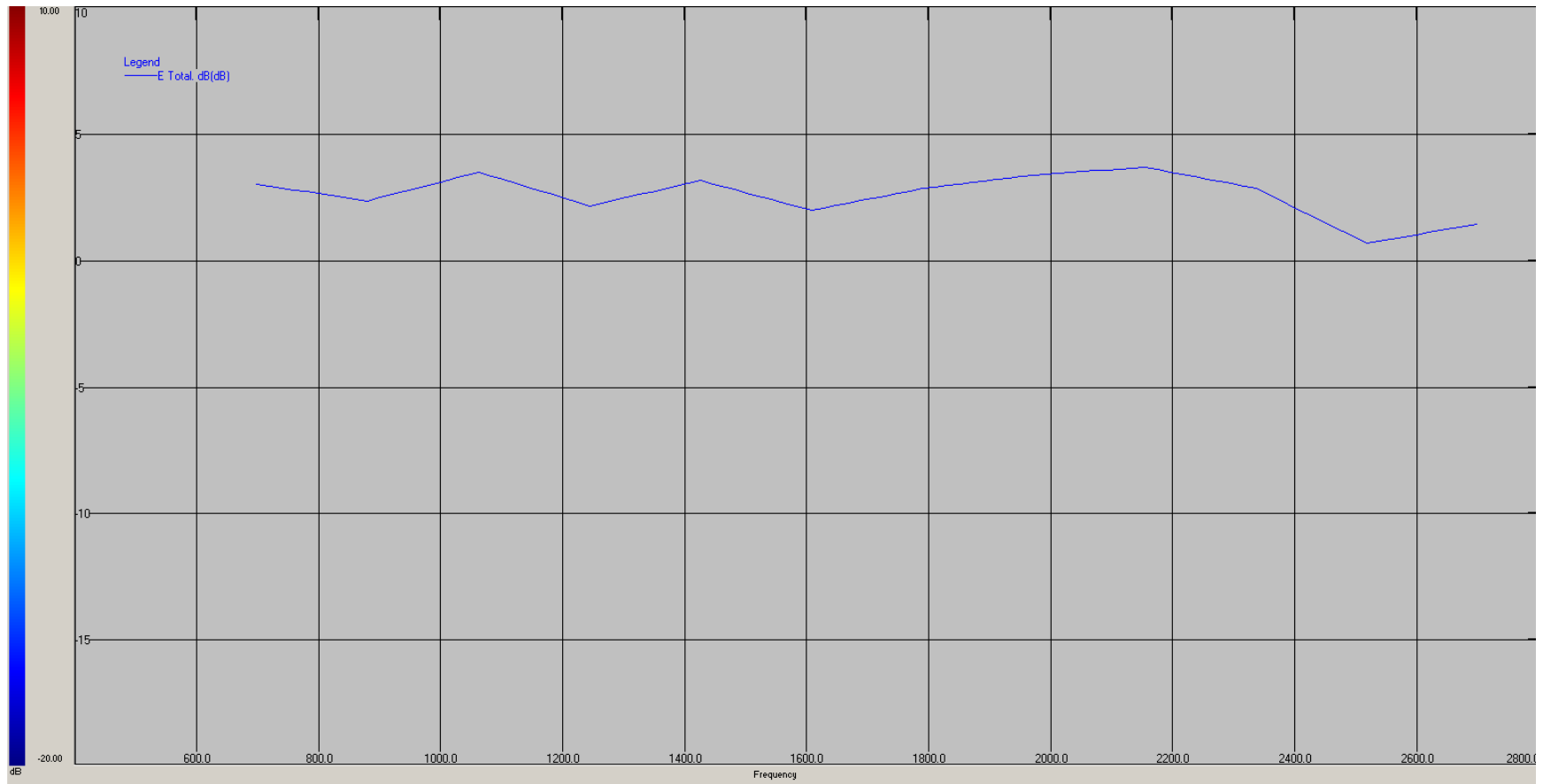
Layer	Max value	Position	Min val...	Position	Beam...	Max val...	Average	Standar...	Marker 1 pos	Marker 1 val...	Marker 2 pos	Marker 2 val...
698(MHz)	2.99 dB	53.00 deg	-26.34 d...	179.00 d...	42.61 deg	29.34 dB	-3.52 dB	5.47	----	----	----	----
880(MHz)	1.91 dB	49.00 deg	-27.60 d...	179.00 d...	49.54 d...	29.51 dB	-4.44 dB	5.69	----	----	----	----
1062(MHz)	3.40 dB	57.00 deg	-25.83 d...	179.00 d...	35.24 d...	29.23 dB	-4.25 dB	5.81	----	----	----	----
1244(MHz)	2.08 dB	60.00 deg	-27.14 dB	0.00 deg	39.55 d...	29.22 dB	-4.78 dB	5.54	----	----	----	----
1426(MHz)	3.08 dB	62.00 deg	-23.64 d...	13.00 deg	31.02 deg	26.72 dB	-5.27 dB	5.98	----	----	----	----
1608(MHz)	1.88 dB	68.00 deg	-22.40 d...	-1.00 deg	33.77 d...	24.27 dB	-5.78 dB	5.59	----	----	----	----
1790(MHz)	2.70 dB	65.00 deg	-23.08 d...	19.00 deg	28.08 d...	25.79 dB	-5.87 dB	6.22	----	----	----	----
1972(MHz)	3.22 dB	70.00 deg	-20.48 d...	-163.00 ...	30.27 d...	23.70 dB	-5.35 dB	5.69	----	----	----	----
2154(MHz)	3.59 dB	69.00 deg	-21.58 dB	-164.00 ...	25.84 d...	25.17 dB	-5.42 dB	6.13	----	----	----	----
2336(MHz)	2.77 dB	70.00 deg	-23.88 d...	-143.00 ...	36.29 d...	26.65 dB	-5.57 dB	6.24	----	----	----	----
2518(MHz)	0.20 dB	73.00 deg	-22.98 d...	-148.00 ...	25.87 d...	23.19 dB	-6.16 dB	6.02	----	----	----	----
2700(MHz)	1.38 dB	35.00 deg	-23.19 dB	-166.00 ...	14.72 deg	24.57 dB	-6.33 dB	6.55	----	----	----	----

THETA = 90

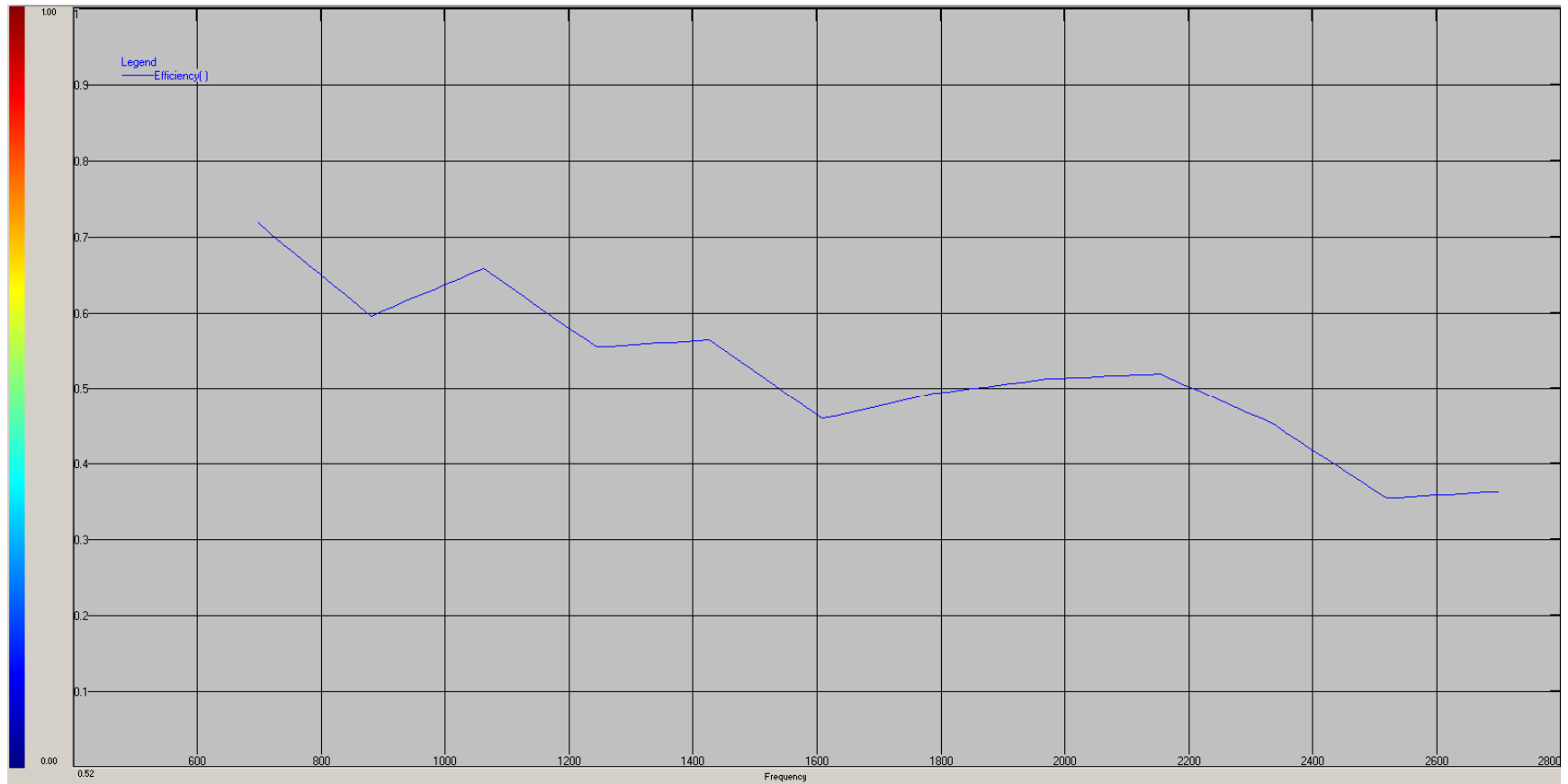


Layer	Max value	Position	Min val...	Position	Beam...	Max val...	Average	Standar...	Marker 1 pos	Marker 1 val...	Marker 2 pos	Marker 2 val...
698(MHz)	-1.86 dB	234.00 deg	-3.06 dB	56.00 d...	----	1.19 dB	-2.45 dB	0.42	----	----	----	----
880(MHz)	-2.26 dB	213.00 deg	-2.72 dB	346.00 ...	----	0.46 dB	-2.50 dB	0.15	----	----	----	----
1062(MHz)	-1.88 dB	219.00 deg	-2.67 dB	26.00 d...	----	0.79 dB	-2.31 dB	0.28	----	----	----	----
1244(MHz)	-2.76 dB	216.00 deg	-3.39 dB	332.00 ...	----	0.63 dB	-3.07 dB	0.19	----	----	----	----
1426(MHz)	-2.03 dB	205.00 deg	-2.73 dB	339.00 ...	----	0.70 dB	-2.38 dB	0.23	----	----	----	----
1608(MHz)	-2.72 dB	213.00 deg	-3.81 dB	341.00 d...	----	1.09 dB	-3.28 dB	0.35	----	----	----	----
1790(MHz)	-1.96 dB	188.00 deg	-2.90 dB	319.00 d...	----	0.94 dB	-2.29 dB	0.32	----	----	----	----
1972(MHz)	-1.47 dB	169.00 deg	-2.85 dB	318.00 d...	----	1.38 dB	-2.10 dB	0.48	----	----	----	----
2154(MHz)	-1.38 dB	141.00 deg	-3.83 dB	276.00 ...	----	2.45 dB	-2.50 dB	0.85	----	----	----	----
2336(MHz)	-1.15 dB	138.00 deg	-4.25 dB	278.00 ...	----	3.10 dB	-2.58 dB	1.09	----	----	----	----
2518(MHz)	-2.26 dB	156.00 deg	-4.51 dB	289.00 ...	----	2.25 dB	-3.58 dB	0.81	----	----	----	----
2700(MHz)	-1.99 dB	159.00 deg	-4.10 dB	39.00 d...	----	2.11 dB	-2.99 dB	0.61	----	----	----	----

Max Gain vs Frequency



Efficiency

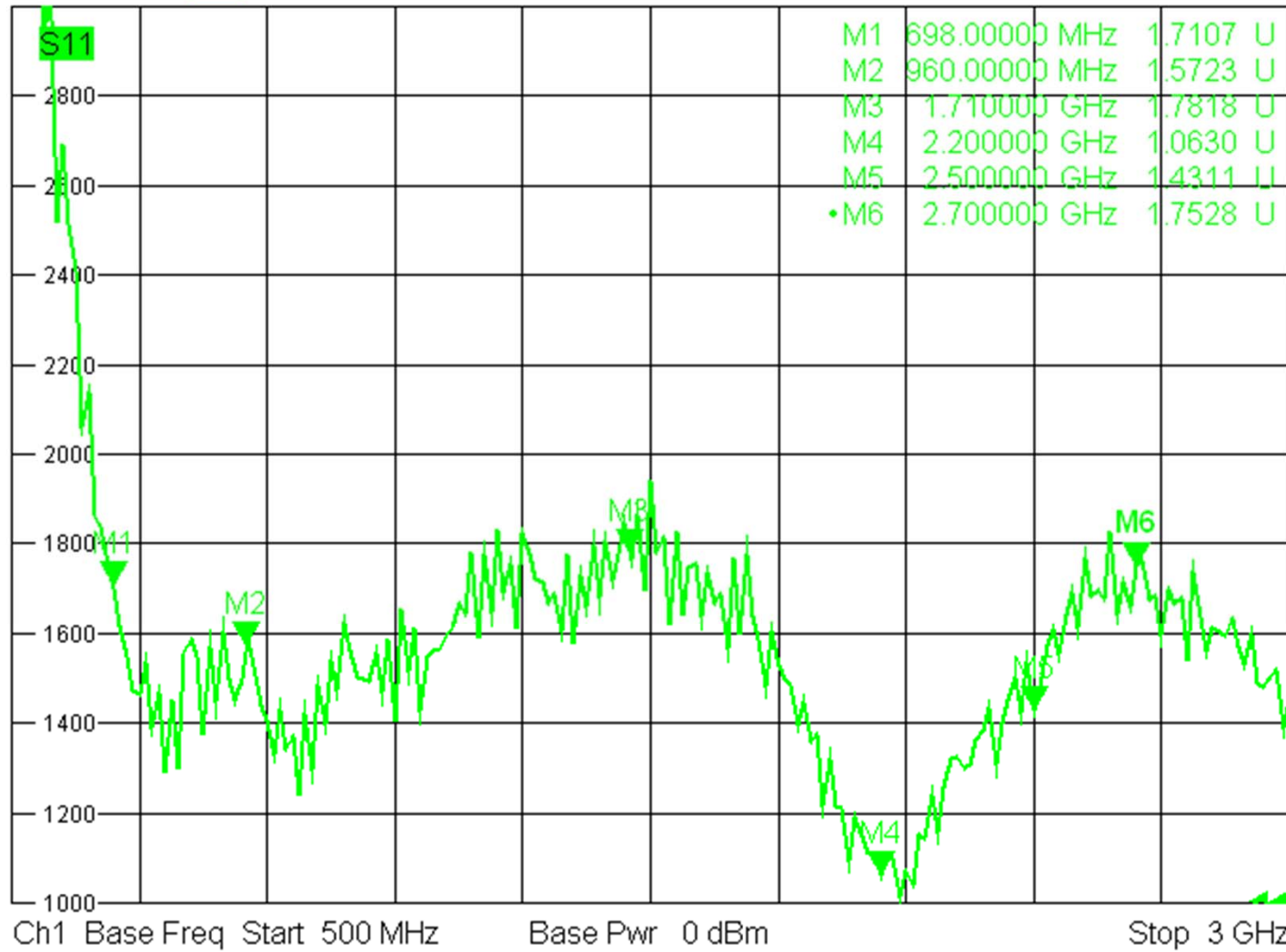


VSWR



Trc1 S11 SWR 200 mU/ Ref 1 U Cal
Mem2[Trc1] S11 SWR 200 mU/ Ref 1 U Invisible

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7/20/2012, 10:47 AM