

Karma LTE Antenna Test Report

Prepared by SAA
2016-11-29

Structure Overview



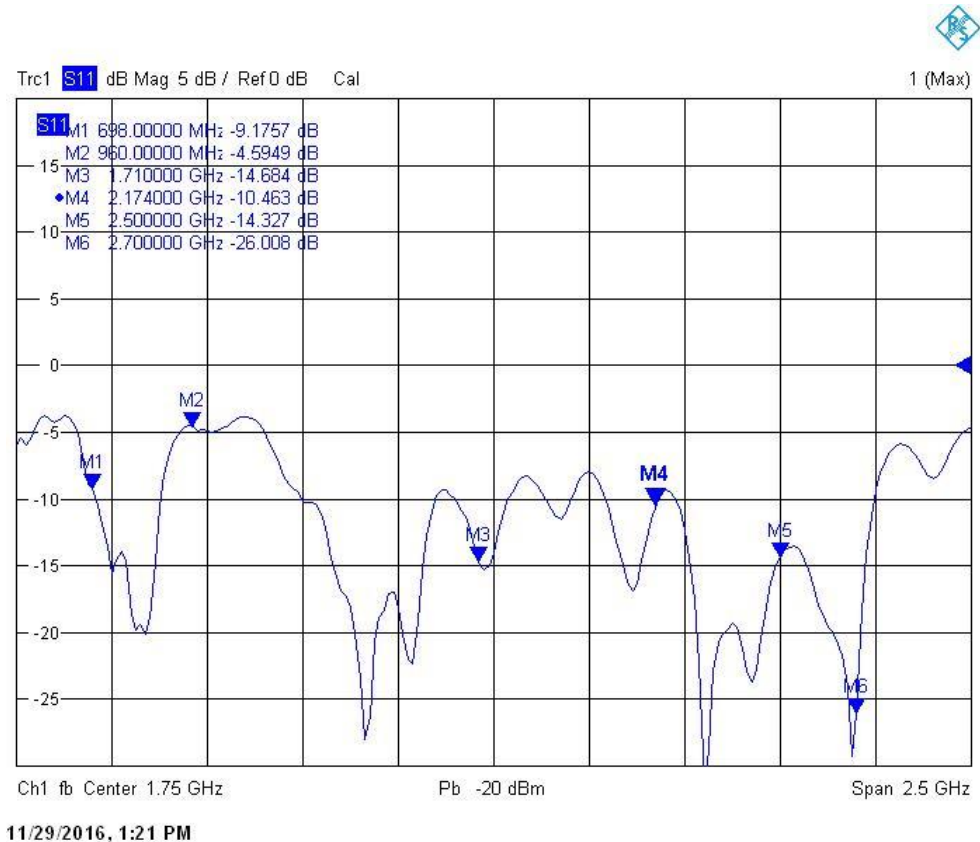
LTE right Antenna



LTE left Antenna

S11 for Karma right LTE Antenna

part number: KA7759-04-00-C



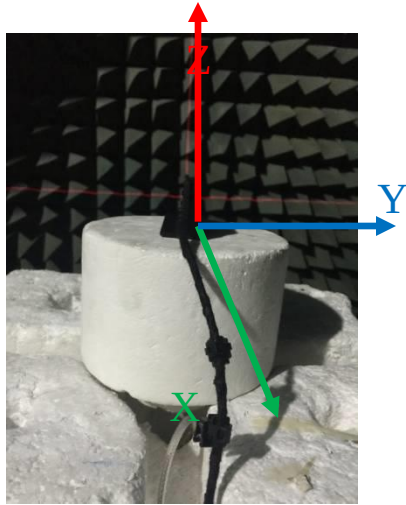
698MHz: -9.2 dB
 960MHz: -4.6 dB
 1.71GHz: -14.7dB
 2.14GHz: -10.5dB
 2.5 GHz: -14.3dB
 2.7 GHz: -26.0dB

Efficiency and Gain for the right LTE antenna

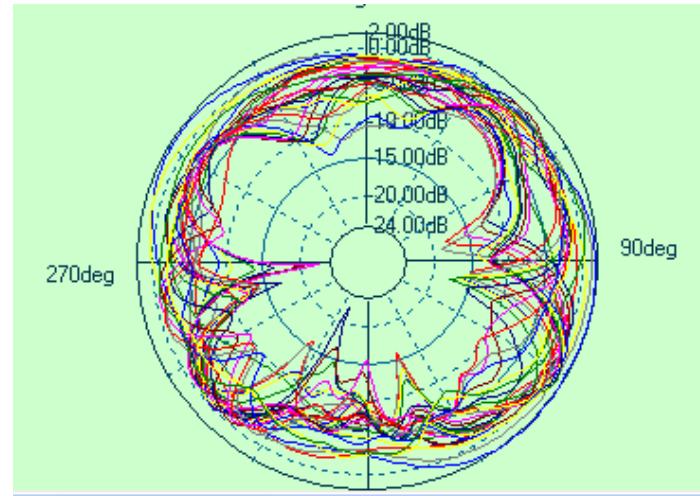


Frequency(MHz)	Gain . dB	Efficiency	Efficiency . dB
698	0.3	48.4%	-3.2
750	1.7	65.2%	-1.9
850	2.3	66.9%	-1.7
900	0.9	49.2%	-3.1
960	-1.8	28.6%	-5.4
1710	4.6	58.6%	-2.3
1748	4.3	56.5%	-2.5
1785	3.7	48.4%	-3.2
1805	3.6	45.0%	-3.5
1850	3.4	43.4%	-3.6
1910	3.6	51.4%	-2.9
1930	3.2	50.4%	-3.0
1950	3.1	51.7%	-2.9
1960	3.3	51.7%	-2.9
1978	3.9	52.6%	-2.8
1990	4.3	55.5%	-2.6
2112	4.1	55.9%	-2.5
2140	4.3	57.7%	-2.4
2168	4.6	57.4%	-2.4
2170	4.6	57.2%	-2.4
2200	4.6	55.3%	-2.6
2250	5.3	61.7%	-2.1
2300	5.3	64.6%	-1.9
2350	4.4	62.4%	-2.1
2400	4.1	64.9%	-1.9
2450	3.5	65.7%	-1.8
2500	2.9	61.3%	-2.1
2600	1.3	58.7%	-2.3
2700	1.0	56.0%	-2.5

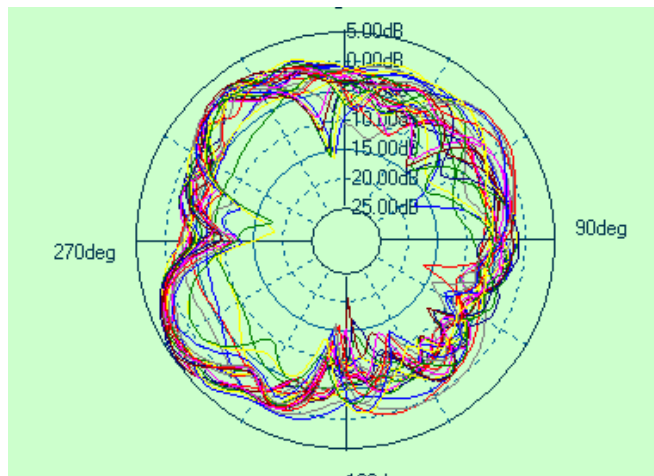
Radiation Pattern – right LTE antenna



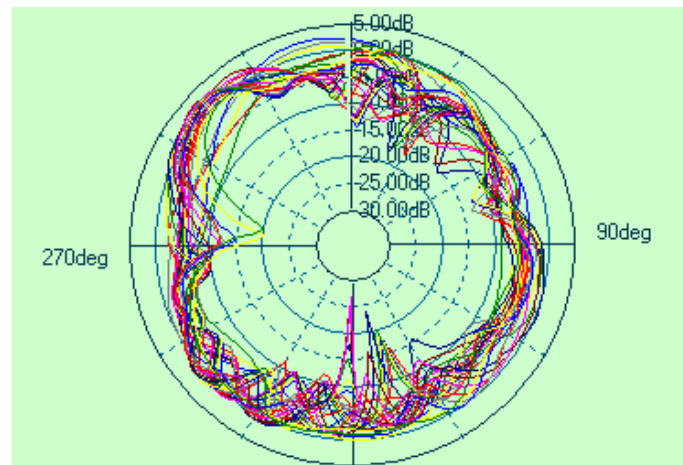
XZ Plane



YZ Plane

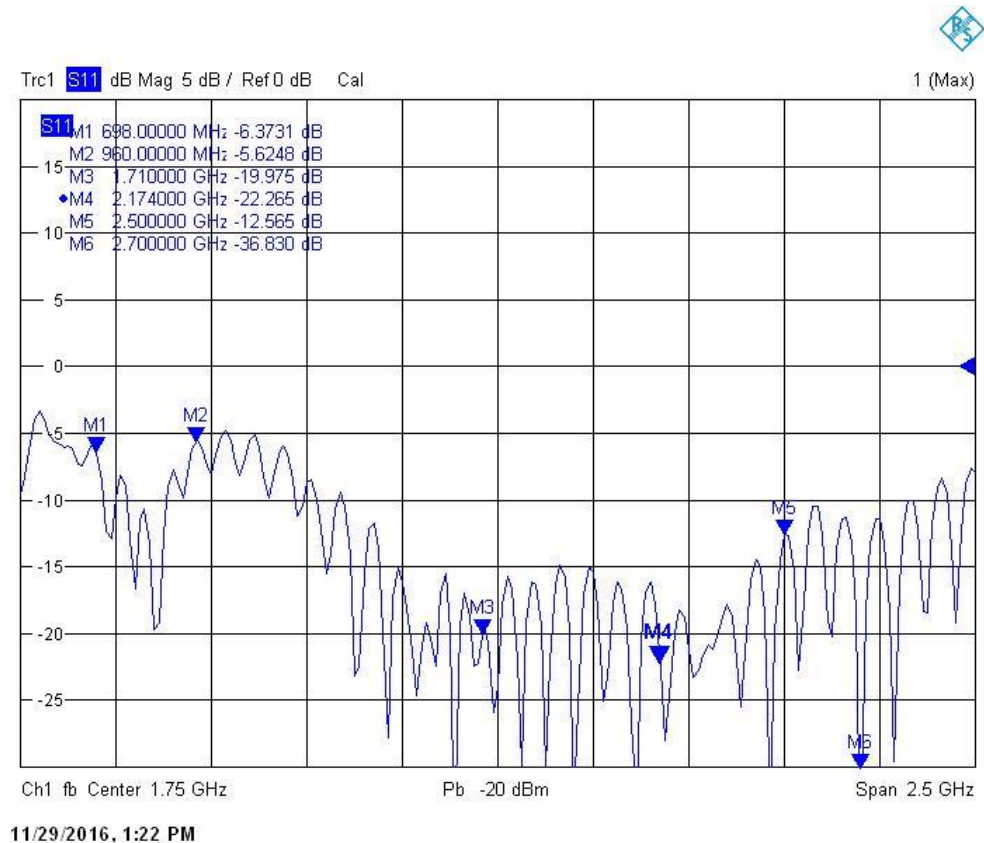


XY Plane



S11 for Karma left LTE Antenna

part number: KA7794-04-00-C



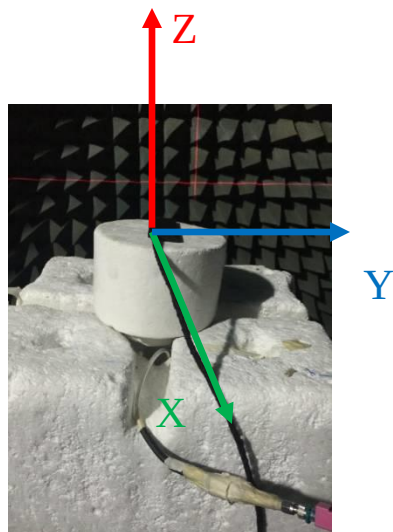
698MHz: -6.4 dB
 960MHz: -5.6 dB
 1.71GHz: -20.0dB
 2.14GHz: -22.3dB
 2.5 GHz: -12.6dB
 2.7 GHz: -36.8dB

Efficiency and Gain for the left LTE antenna

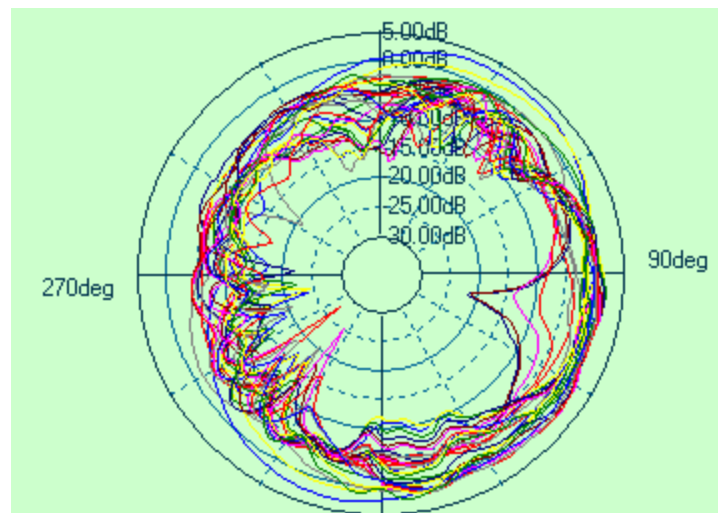


Frequency	Gain . dB	Efficiency	Efficiency . d
698	-0.3	35%	-4.6
750	1.6	53%	-2.8
850	3.5	59%	-2.3
900	2.4	46%	-3.3
960	0.8	30%	-5.2
1710	2.8	45%	-3.4
1748	3.2	46%	-3.4
1785	3.1	40%	-3.9
1805	3.5	42%	-3.7
1850	3.4	38%	-4.2
1910	3.7	41%	-3.9
1930	3.4	40%	-4.0
1950	3.6	43%	-3.6
1960	3.3	43%	-3.7
1978	2.7	41%	-3.9
1990	2.7	40%	-3.9
2112	3.7	43%	-3.6
2140	3.3	43%	-3.6
2168	3.1	45%	-3.5
2170	3.1	45%	-3.5
2200	3.2	46%	-3.4
2250	4.1	47%	-3.3
2300	4.1	48%	-3.2
2350	3.9	47%	-3.2
2400	3.6	47%	-3.3
2450	3.1	48%	-3.2
2500	2.4	45%	-3.4
2600	1.4	42%	-3.8
2700	2.4	41%	-3.8

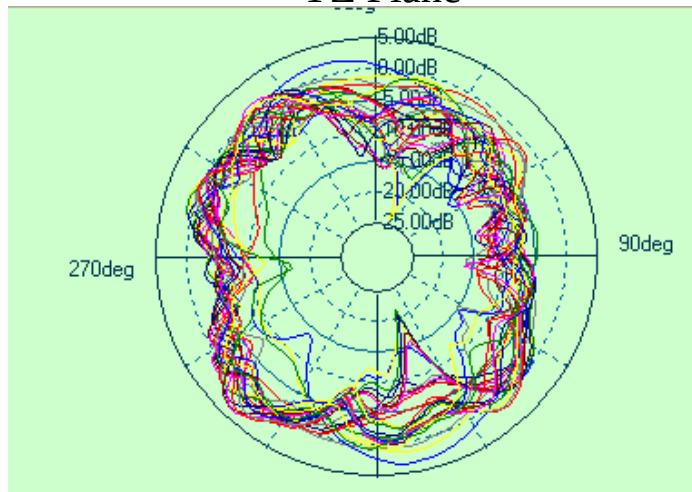
Radiation Pattern – left LTE antenna



XZ Plane



YZ Plane



XY Plane

