



ALLNET

ALL19103

MIMO Flat-Patch LTE Antenna



- Frequency: 698-960 / 1710~2700MHz
- Gain: 3,5~5dbi
- Polarization: Dual
- VSWR: 1,5~2
- Antenna Connection: 2x 7m low loss with SMA-Male

Part No: 149037
EAN: 4038816149039

Errors and technical changes that serve the interests of progress or development of the product are reserved.

www.allnet.de



Model:

ALL19103

Port 1 (MHz)	698~806MHz	806-960MHz	1710-2700MHz
Port 2 (MHz)	698~806MHz	806-960MHz	1710-2700MHz
Polarization	Dual Linear: V&H H & V		
Gain	4±1dBi	5±1dBi	3.5±1dBi
Radio Pattern	Hybrid		
Ports Isolation	≥20dB		
VSWR	<2	<1.8	<1.5
Max Power	50 watts		

Mechanical Specification

Connector	2 x SMA-male
Cable Length	Low Loss Cable 7meters x 2
Dimension	207x177x45mm
Rated wind velocity	60m/s
Weight	1Kg (included mount kits)
Temperature	-40°~+75°





Port1

Gain		Cross Polar			
Frequency (MHz)	Gain (dB)	0deg	±30deg	±60deg	FrontBack Ratio(dB)
698	Mar-59	Jun-38	Mar-22	May-33	0.61
725	Mar-46	6-Oct	Feb-88	May-72	0.53
750	Mar-73	Jun-99	Sep-13	5-Jun	0.65
806	Apr-46	8-Mar	Nov-53	0.13	Jan-48
825	Apr-29	May-24	Dec-90	Jan-59	Jan-20
890	Apr-70	Mar-40	Oct-96	0.65	0.37
928	Apr-87	Mar-60	13.85	0.91	Feb-47
960	5-Jul	Dec-96	Apr-88	0.73	Jan-49
1710	4-Sep	Sep-55	1-Feb	Feb-80	-0.37
2170	Apr-32	Oct-55	Nov-69	Jan-67	-1.34
2300	Apr-34	Jul-51	Mar-78	7-Jan	-5.57
2400	Mar-69	Jul-63	Jan-31	0.12	0.03
2500	Feb-72	Apr-30	1-Apr	Apr-43	-3.07
2690	2-Jun	May-60	Feb-33	Mar-70	-1.92



Horizontal Analysis Theta=90

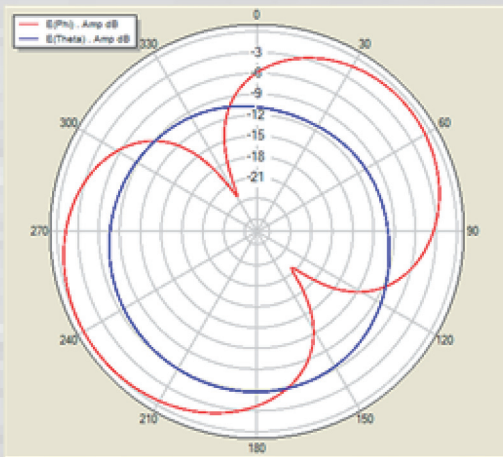
Frequency (MHz)	BeamWidth (dB)	FrontToBackRatio (dB)	1stSLL (dB)	Tilt (deg)	Roundness (dB)
698	101.08	0.61	0.61	235.98	22.82
725	107.39	0.53	0.53	242.98	27.59
750	73.13	0.65	0.65	47.95	36.29
806	67.23	Jan-48	Jan-48	42.92	22.71
825	67.81	Jan-20	Jan-20	42.02	28.72
890	63.96	0.37	0.37	40.05	37.74
928	61.70	Feb-68	Feb-68	39.87	37.87
960	59.15	Feb-73	Feb-52	37.00	18.29
1710	40.82	Jun-77	Mar-71	152.11	20-Jul
2170	29.60	May-22	13.24	45.97	36.84
2300	33.36	0.47	Feb-84	44.90	14.72
2400	44.98	0.03	Jan-88	202.94	17.96
2500	24.39	0.83	Jan-32	38.97	37.90
2690	21.95	Jan-79	Oct-91	36.10	25.37

Vertical Analysis Phi=90

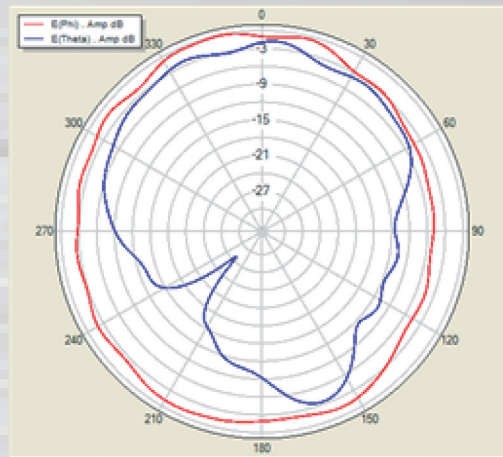
Frequency (MHz)	BeamWidth (dB)	FrontToBackRatio (dB)	1stNullFill (dB)	1stSLL (dB)	Tilt (deg)
698	NaN	Jan-43	Jan-97	0.41	-11.98
725	NaN	Feb-29	Jan-86	Jan-88	-29.08
750	89.24	Feb-59	Feb-84	0.42	-9.99
806	64.83	Mar-59	Feb-66	1.00	-28.00
825	97.10	Feb-30	Feb-28	0.42	-31.07
890	79.52	Mar-40	3.00	0.17	-24.94
928	55.00	4-Jun	Feb-24	Feb-44	-4.95
960	72.08	Apr-63	Feb-38	0.29	-19.00
1710	NaN	Aug-59	0.09	6-Sep	167.03
2170	25-Jul	0.91	23.86	Mar-33	-167.03
2300	44.07	0.14	27.96	1-Mar	45.83
2400	37.10	Apr-70	14.45	0.24	-28.00
2500	32.75	Apr-20	10-Jun	0.86	-29.08



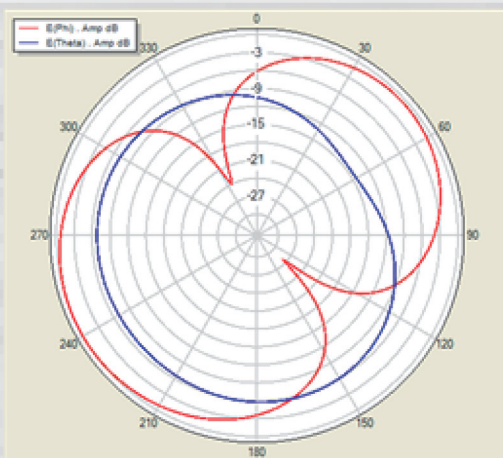
H Theta=90 freq=698MHz



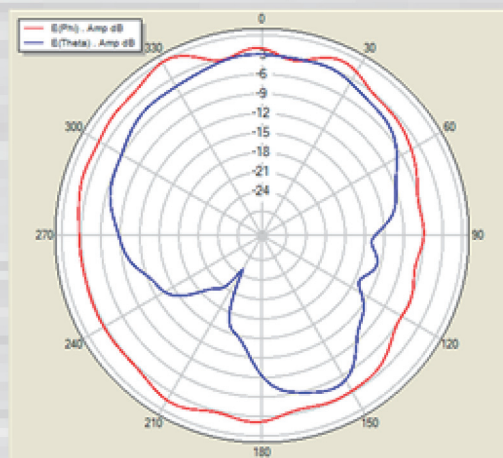
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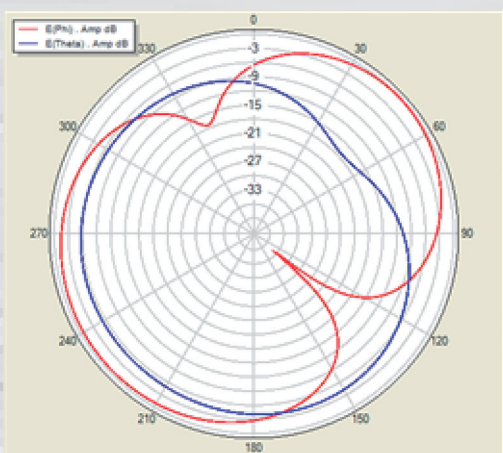
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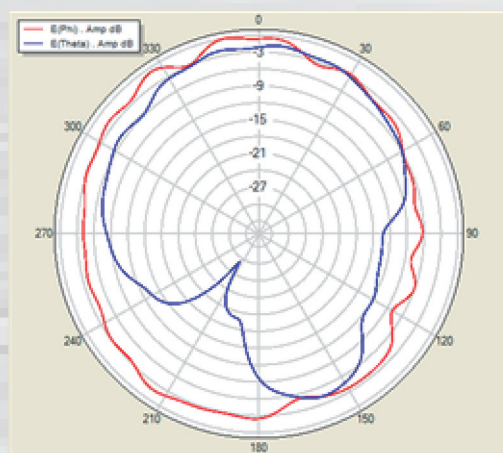
V Phi=90 freq=725MHz



H Theta=90 freq=750MHz

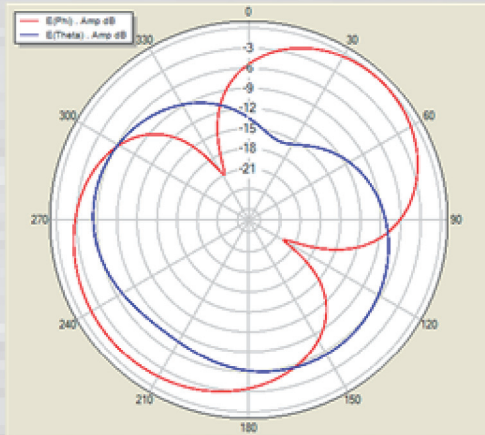


V Phi=90 freq=750MHz

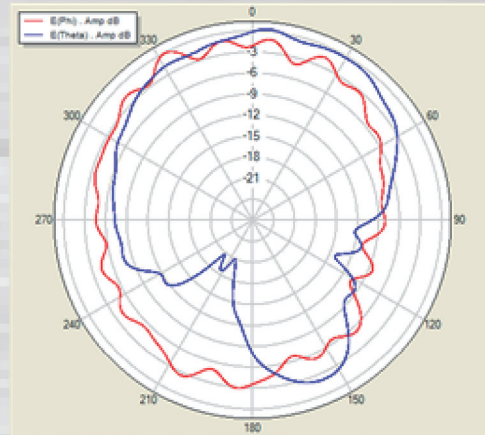




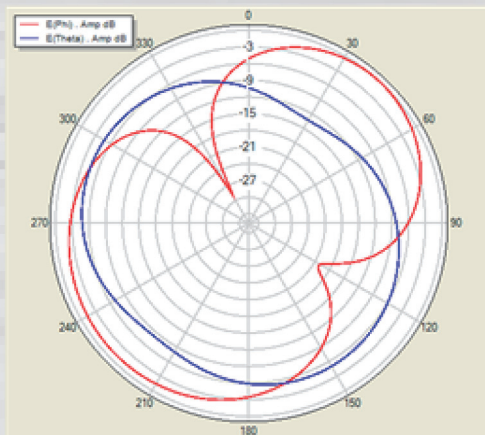
H Theta=90 freq=806MHz



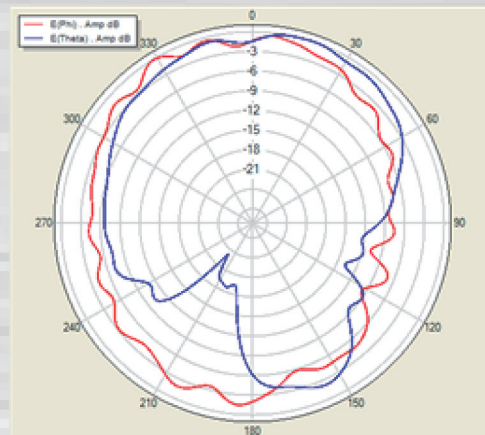
V Phi=90 freq=806MHz



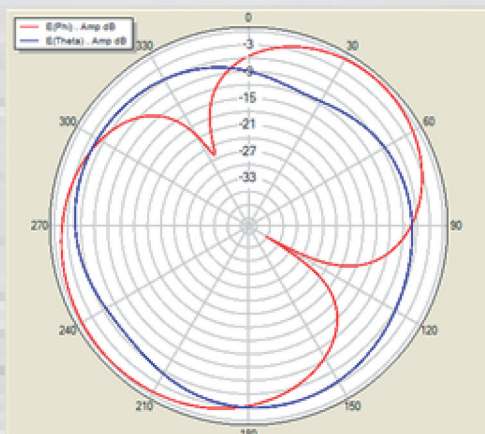
H Theta=90 freq=825MHz



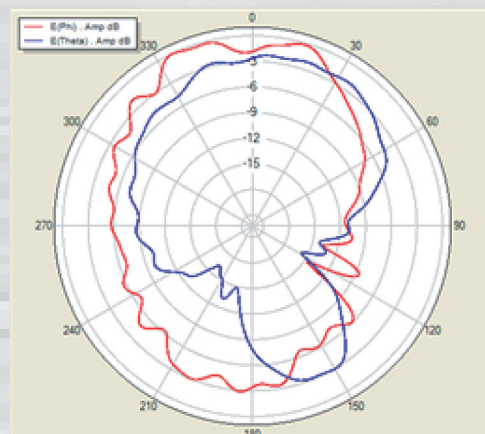
V Phi=90 freq=825MHz



H Theta=90 freq=890MHz

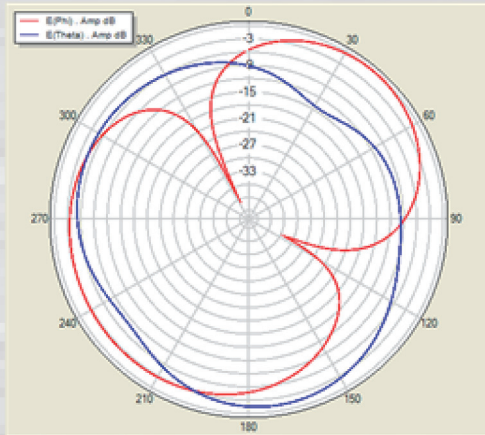


V Phi=90 freq=890MHz

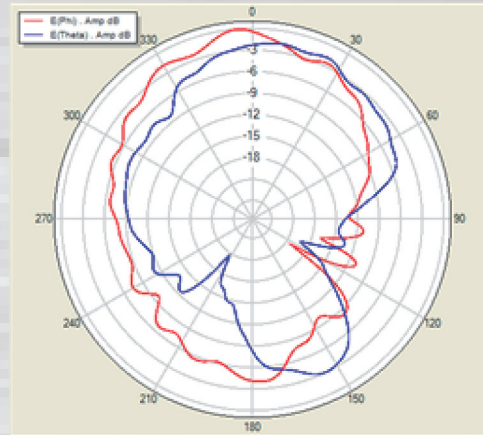




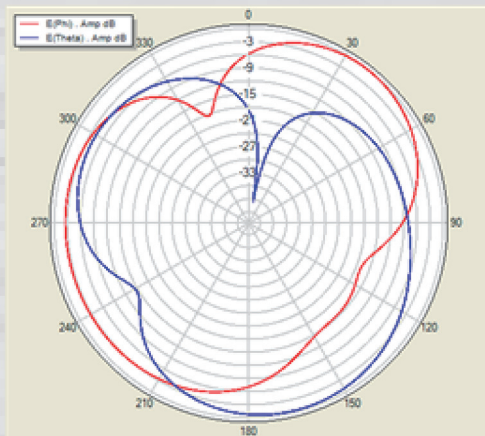
H Theta=90 freq=928MHz



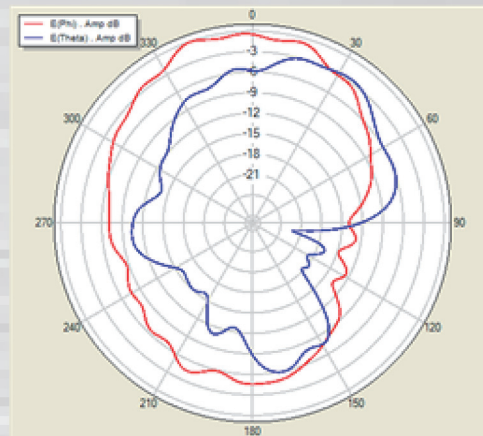
V Phi=90 freq=928MHz



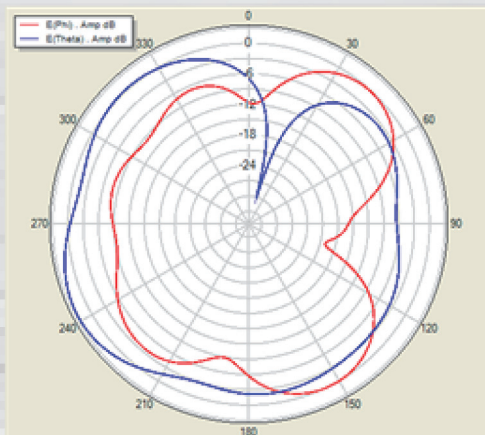
H Theta=90 freq=960MHz



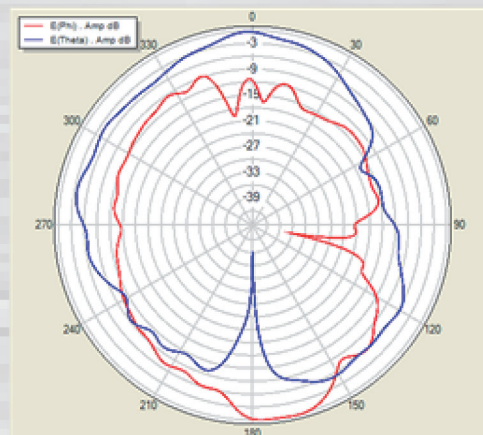
V Phi=90 freq=960MHz



H Theta=90 freq=1710MHz

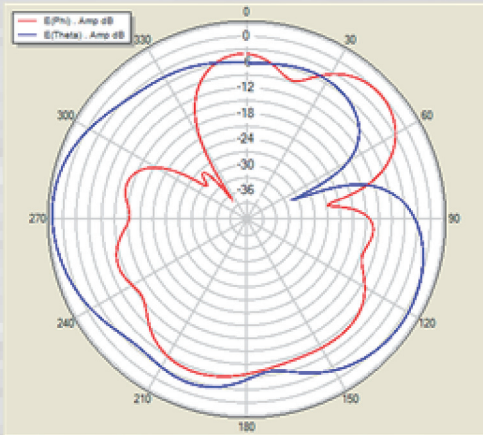


V Phi=90 freq=1710MHz

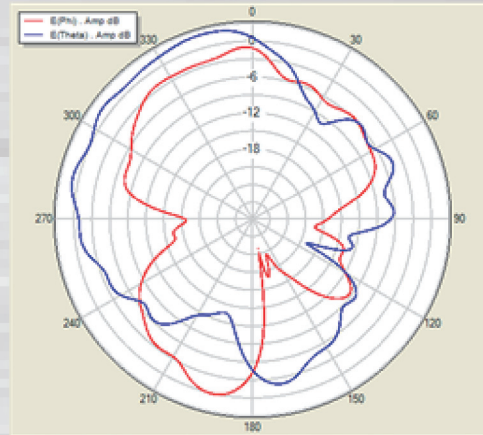




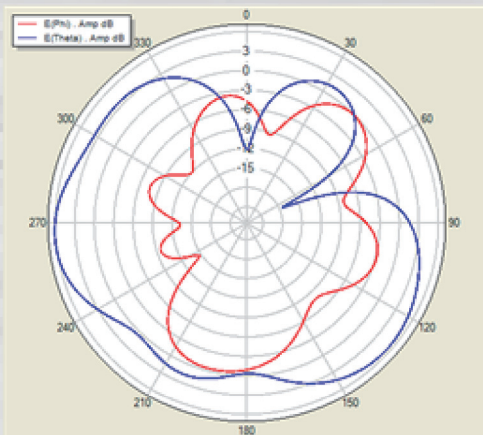
H Theta=90 freq=2170MHz



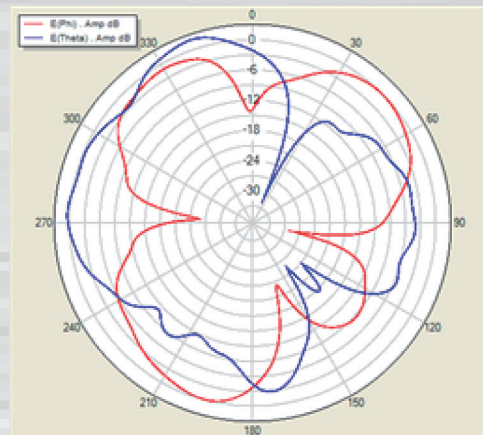
V Phi=90 freq=2170MHz



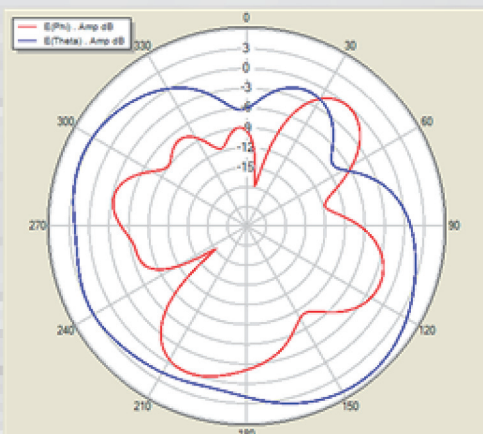
H Theta=90 freq=2300MHz



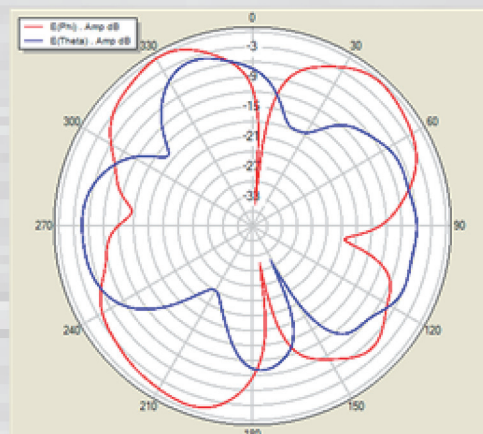
V Phi=90 freq=2300MHz



H Theta=90 freq=2400MHz

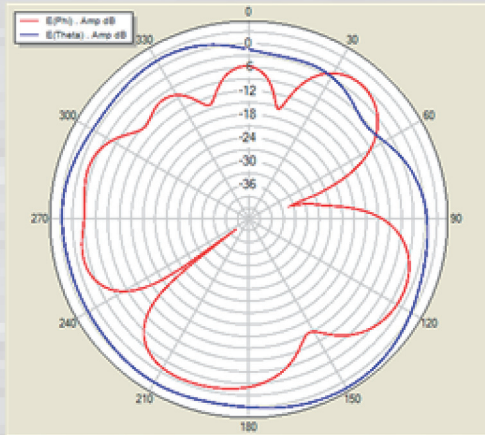


V Phi=90 freq=2400MHz

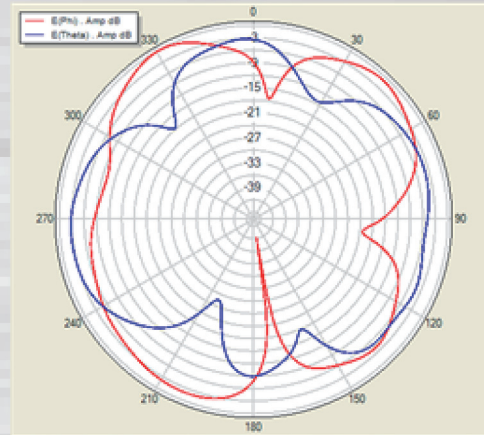




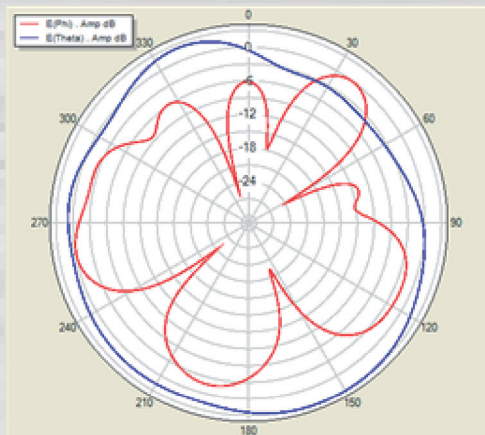
H Theta=90 freq=2500MHz



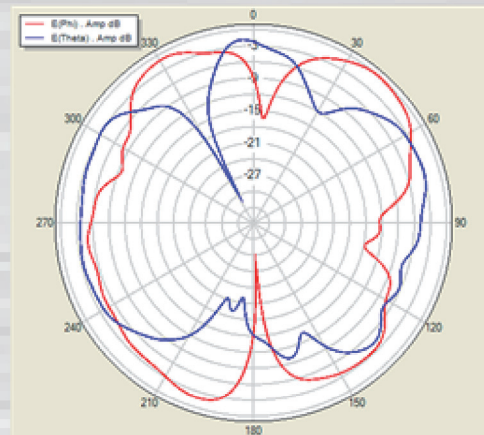
V Phi=90 freq=2500MHz



H Theta=90 freq=2690MHz



V Phi=90 freq=2690MHz





Gain		Cross Polar			
Frequency (MHz)	Gain (dB)	0deg	±30deg	±60deg	FrontBack Ratio(dB)
698	Mar-38	Jul-66	Feb-51	Jun-38	0.72
725	Mar-29	Apr-93	Jan-43	Apr-75	0.64
750	Mar-69	Jan-94	Nov-80	2.00	0.05
806	Apr-36	Apr-27	7-Oct	0.65	Jan-51
825	Apr-51	Mar-59	Jun-70	2-Jul	Jan-18
890	Apr-13	Mar-34	Jun-81	May-95	Jan-16
928	5.00	Apr-72	6-Oct	7-Nov	Feb-92
960	Apr-64	Feb-14	Jun-82	Nov-59	Jan-26
1710	Mar-26	Apr-67	Feb-22	Jan-65	-0.06
2170	Mar-79	Aug-88	Apr-74	Jan-25	0.05
2300	Apr-13	Jul-34	Aug-70	0.12	-3.02
2400	Mar-57	Jun-27	Jul-27	Apr-17	-2.06
2500	Feb-74	May-38	Apr-90	Mar-31	-1.71
2690	2-Jan	Mar-40	3-Mar	3-Nov	-0.75



Horizontal Analysis Theta=90

Frequency (MHz)	BeamWidth (dB)	FrontToBack- Ratio (dB)	1stSLL (dB)	Tilt (deg)	Roundness (dB)	1stGSL (dB)	MaxLevel (dB)	MinLevel (dB)
698	NaN	0.72	0.72	308.00	40.02	0.72	0.18	-40.02
725	NaN	0.64	0.64	302.97	37.78	0.64	0.07	-37.74
750	70.45	0.05	0.05	140.08	30.39	0.05	-1.00	-31.46
806	63.09	Jan-51	Jan-51	147.08	25.69	Jan-51	0.17	-25.53
825	63.62	Jan-18	Jan-18	147.08	28.94	Jan-18	-0.06	-29.01
890	62.65	Jan-16	Jan-16	146.01	30.78	Jan-16	-1.18	-32.08
928	62.82	Feb-92	Feb-92	147.08	25.52	Feb-92	-0.80	-26.32
960	66.25	Feb-16	Apr-13	140.98	21-Dec	Feb-16	-1.38	-22.52
1710	39.73	Jun-49	Dec-89	33.04	20.82	Mar-83	-1.90	-22.73
2170	30.78	Feb-51	Apr-83	142.06	28.61	6-Feb	-0.91	-29.55
2300	31.65	Mar-23	Apr-70	146.01	17.88	Apr-53	-2.58	-20.46
2400	27-Aug	Jan-22	Aug-54	149.06	23.83	3.00	-2.64	-26.48
2500	23.67	Jan-68	May-50	149.96	36.32	Jan-55	-2.57	-39.28
2690	21.28	Feb-88	Apr-61	151.04	37.50	13.15	-1.99	-39.91

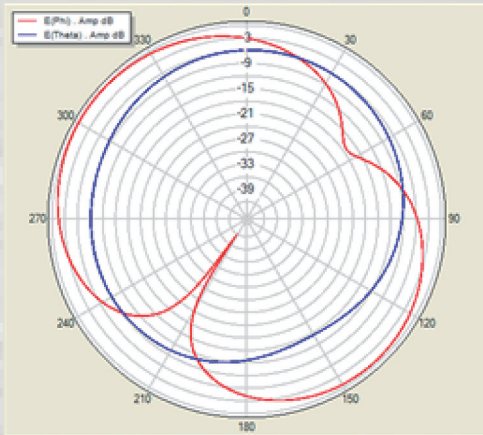


Vertical Analysis Phi=90

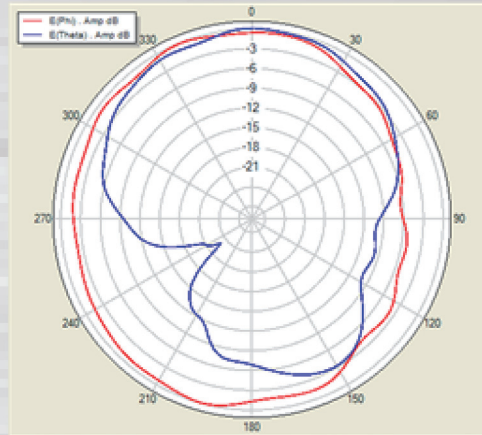
Frequency	BeamWidth	FrontTo-BackRatio	1stNullFill	1stSLL	Tilt	Roundness	1stGSL	MaxLevel	MinLevel
(MHz)	(dB)	(dB)	(dB)	(dB)	(deg)	(dB)	(dB)	(dB)	(dB)
698	NaN	Jan-37	1-Sep	0.43	-22.96	Jun-36	0.77	0.54	-5.83
725	NaN	Jan-96	Jan-28	Jan-18	-31.97	Jun-98	Jan-19	Jan-21	-5.76
750	108.97	2-Oct	Jan-88	Feb-61	-10.18	Aug-70	0.97	1-Aug	-7.62
806	100.98	0.16	Feb-72	0.36	2-Jul	Nov-90	Jan-51	-0.15	-12.05
825	NaN	0.73	Oct-95	Feb-17	-178.92	Dec-54	Jun-73	0.96	-11.58
890	81.75	0.06	Feb-61	0.55	-26.02	15.78	Feb-13	Jan-21	-14.59
928	48.64	Feb-58	2.00	0.32	Feb-97	20.30	Jan-89	Feb-21	-18.09
960	62.68	Jan-52	3-Oct	0.66	-24.04	25.19	Jan-85	Feb-21	-23.12
1710	NaN	Jun-86	Aug-16	Mar-29	178.02	35.30	Jul-51	Feb-66	-32.64
2170	46.50	May-66	Feb-42	Aug-65	-2.97	30.60	0.68	0.17	-30.71
2300	46.20	Jan-40	17.94	Mar-38	-163.07	28.97	8-Aug	Feb-15	-26.83
2400	41.58	0.40	13-Feb	1-May	42.95	24.20	Apr-50	2-Jan	-22.23
2500	32.27	Feb-63	14.14	0.28	-28.90	27.24	0.05	0.84	-26.45
2690	39.66	Jan-52	Jul-27	1-Jan	37.01	20.79	Apr-89	1-Jun	-19.85



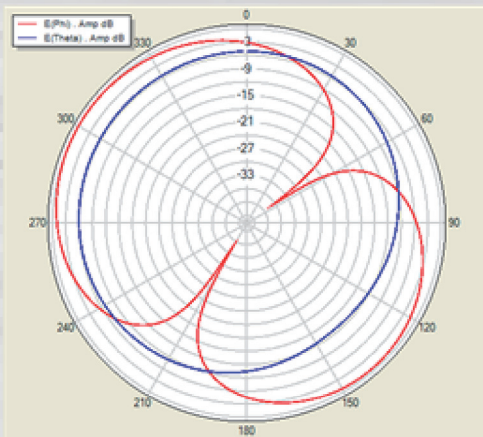
H Theta=90 freq=698MHz



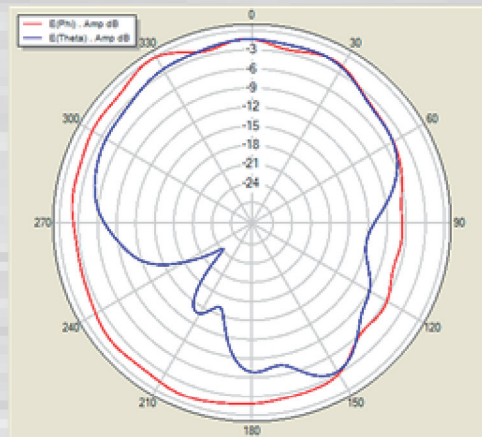
V Phi=90 freq=698MHz



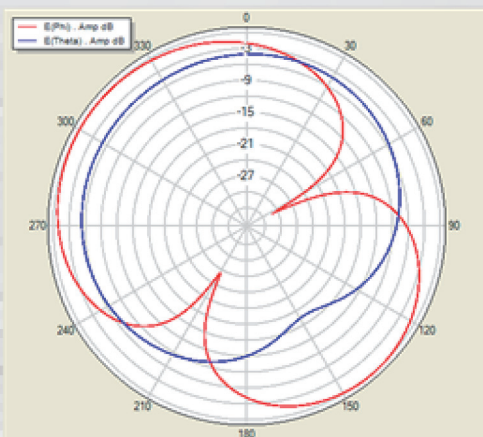
H Theta=90 freq=725MHz



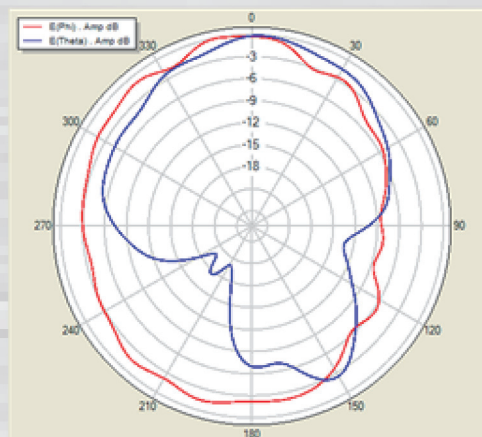
V Phi=90 freq=725MHz



H Theta=90 freq=750MHz

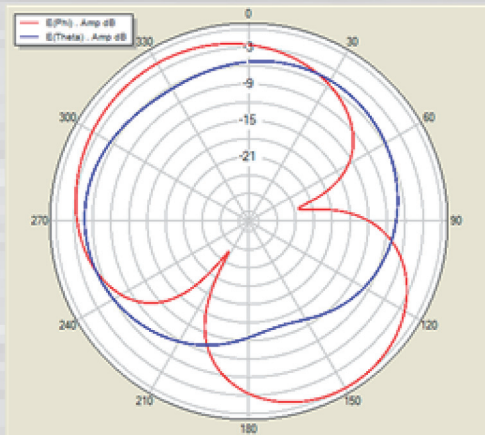


V Phi=90 freq=750MHz

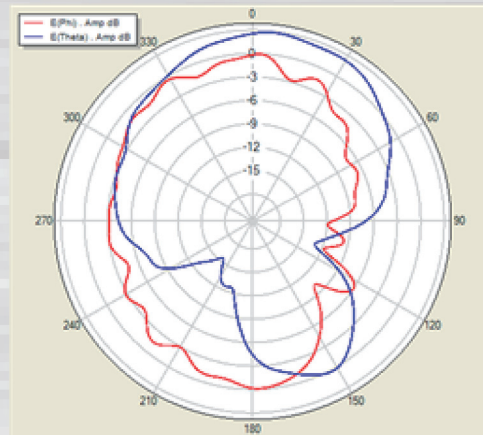




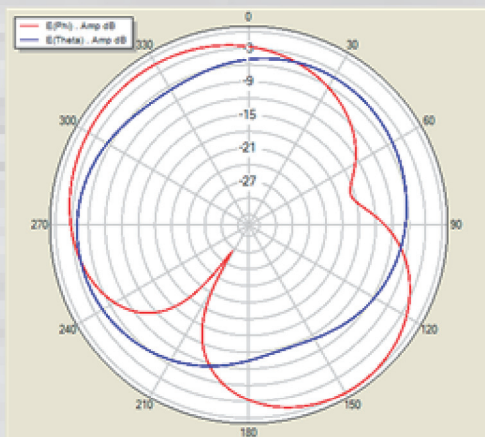
H Theta=90 freq=806MHz



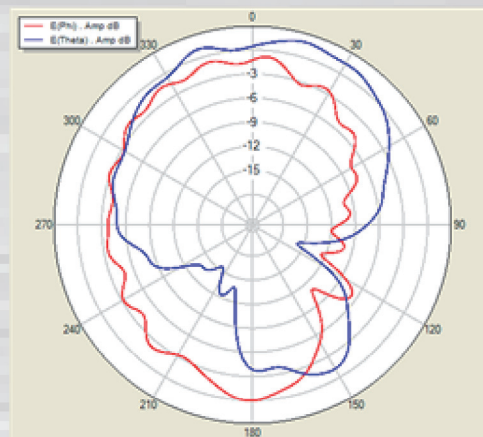
V Phi=90 freq=806MHz



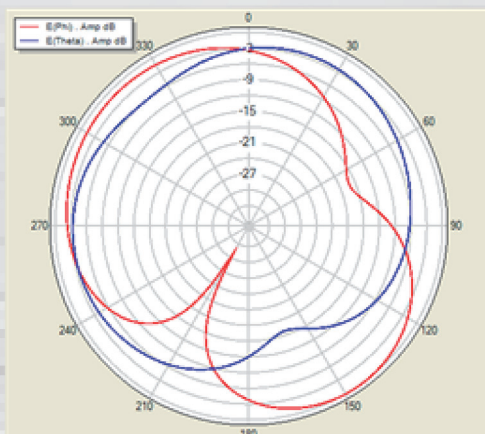
H Theta=90 freq=825MHz



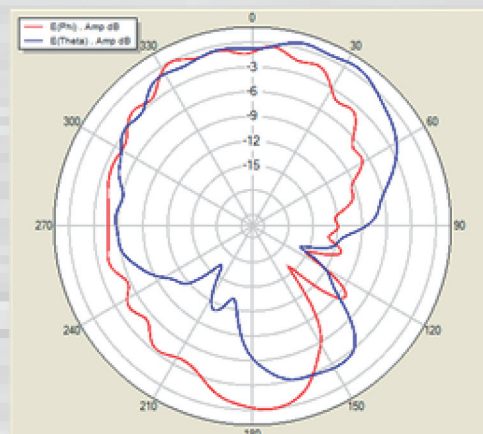
V Phi=90 freq=825MHz



H Theta=90 freq=890MHz

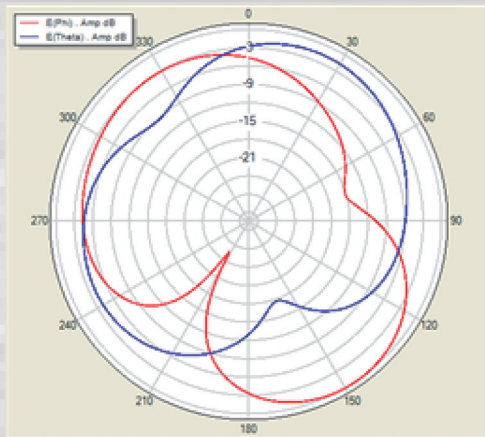


V Phi=90 freq=890MHz

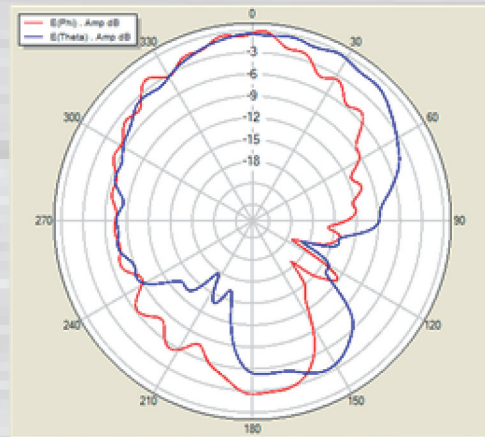




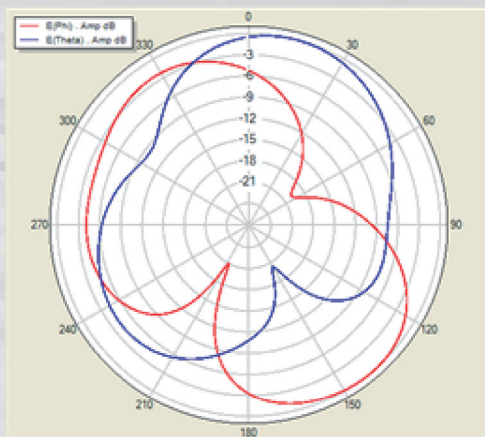
H Theta=90 freq=928MHz



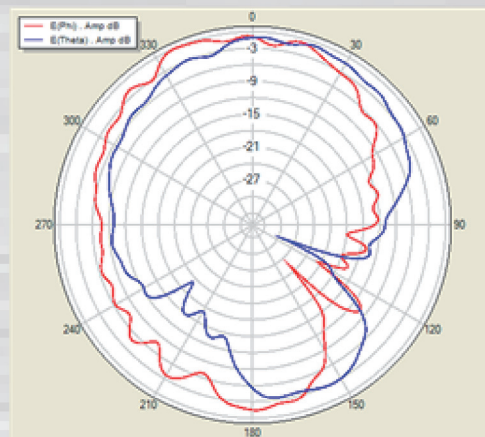
V Phi=90 freq=928MHz



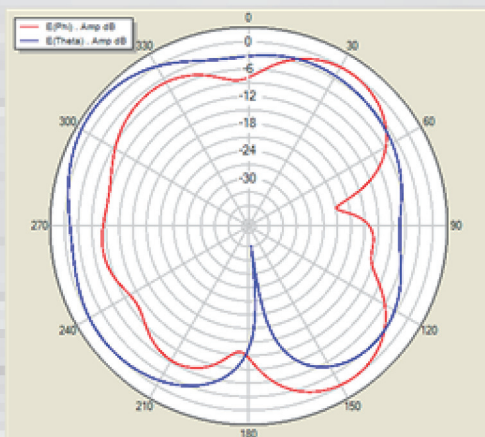
H Theta=90 freq=960MHz



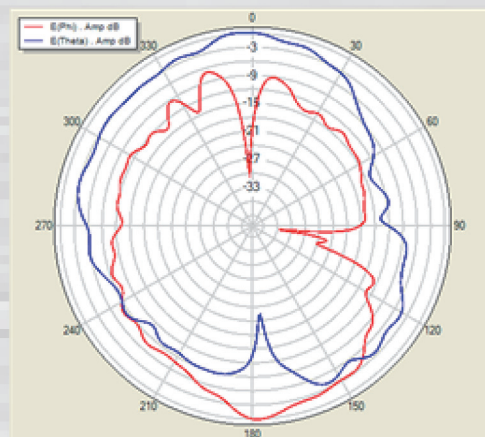
V Phi=90 freq=960MHz



H Theta=90 freq=1710MHz

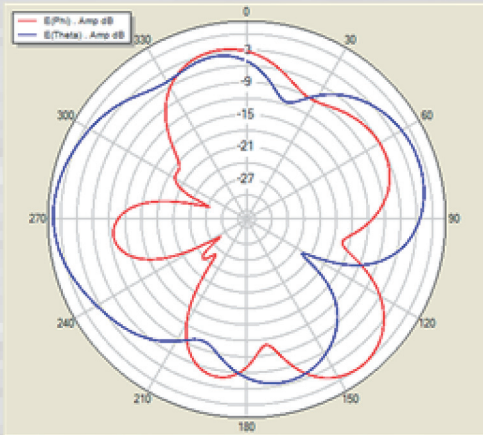


V Phi=90 freq=1710MHz

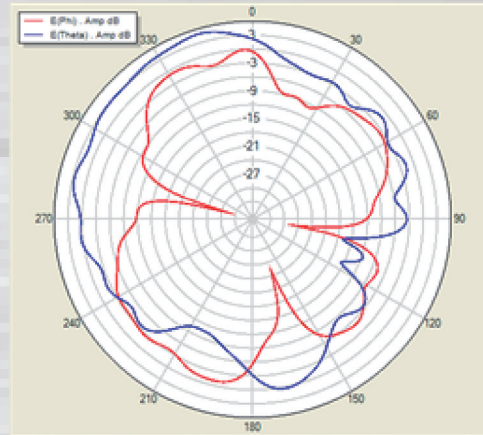




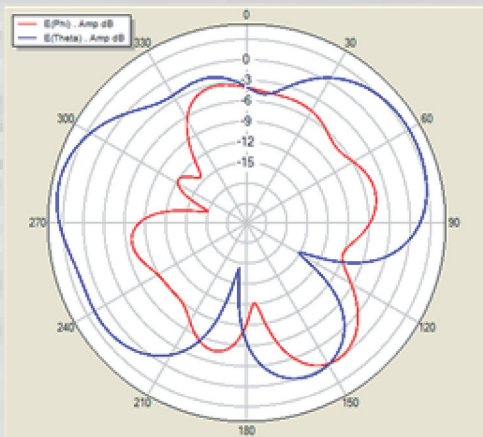
H Theta=90 freq=2170MHz



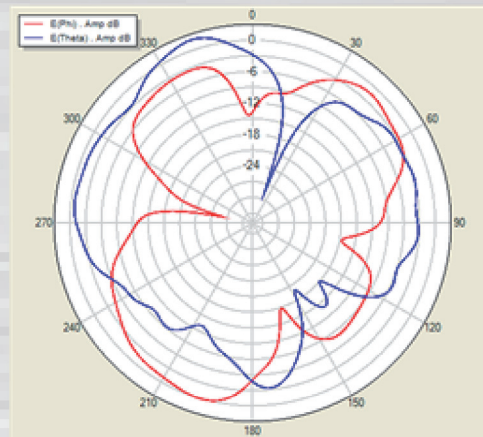
V Phi=90 freq=2170MHz



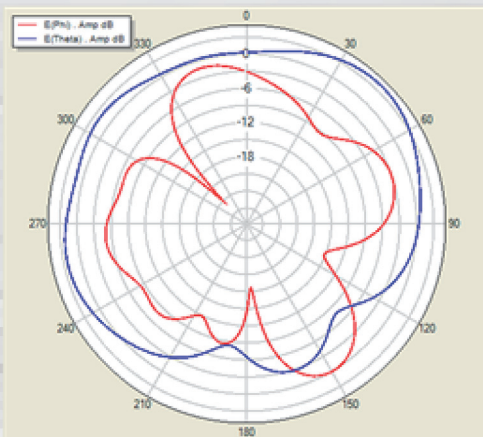
H Theta=90 freq=2300MHz



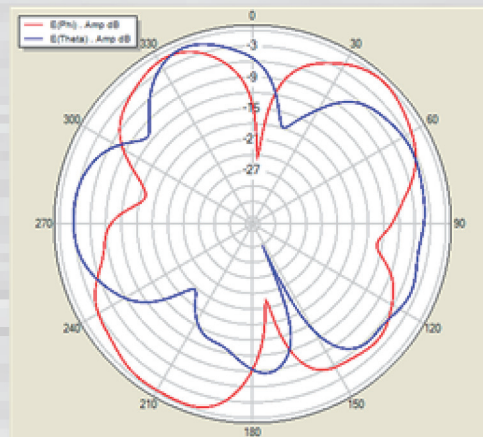
V Phi=90 freq=2300MHz



H Theta=90 freq=2400MHz

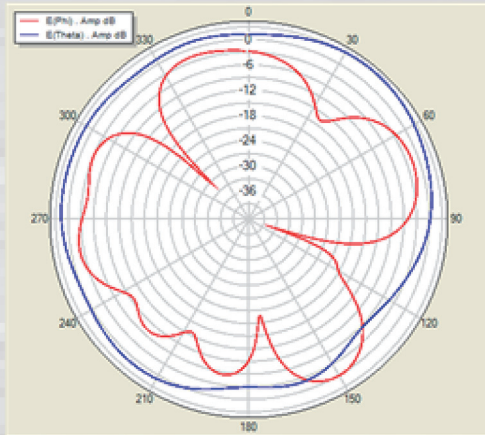


V Phi=90 freq=2400MHz

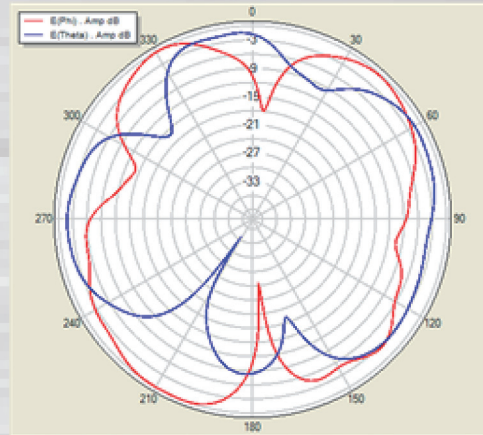




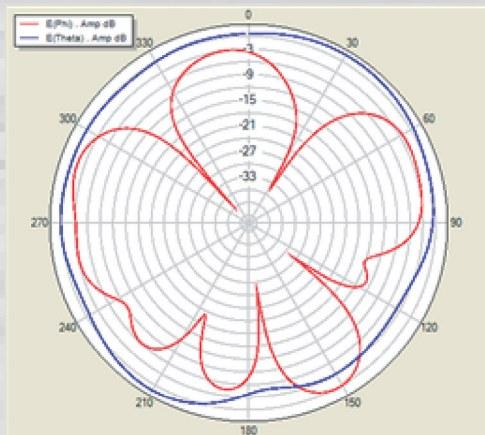
H Theta=90 freq=2500MHz



V Phi=90 freq=2500MHz



H Theta=90 freq=2690MHz



V Phi=90 freq=2690MHz

