

Antenna Test Report (Passive-BW)

Manufacturer: Shenzhen Feixin Wireless Communication Co. LTD

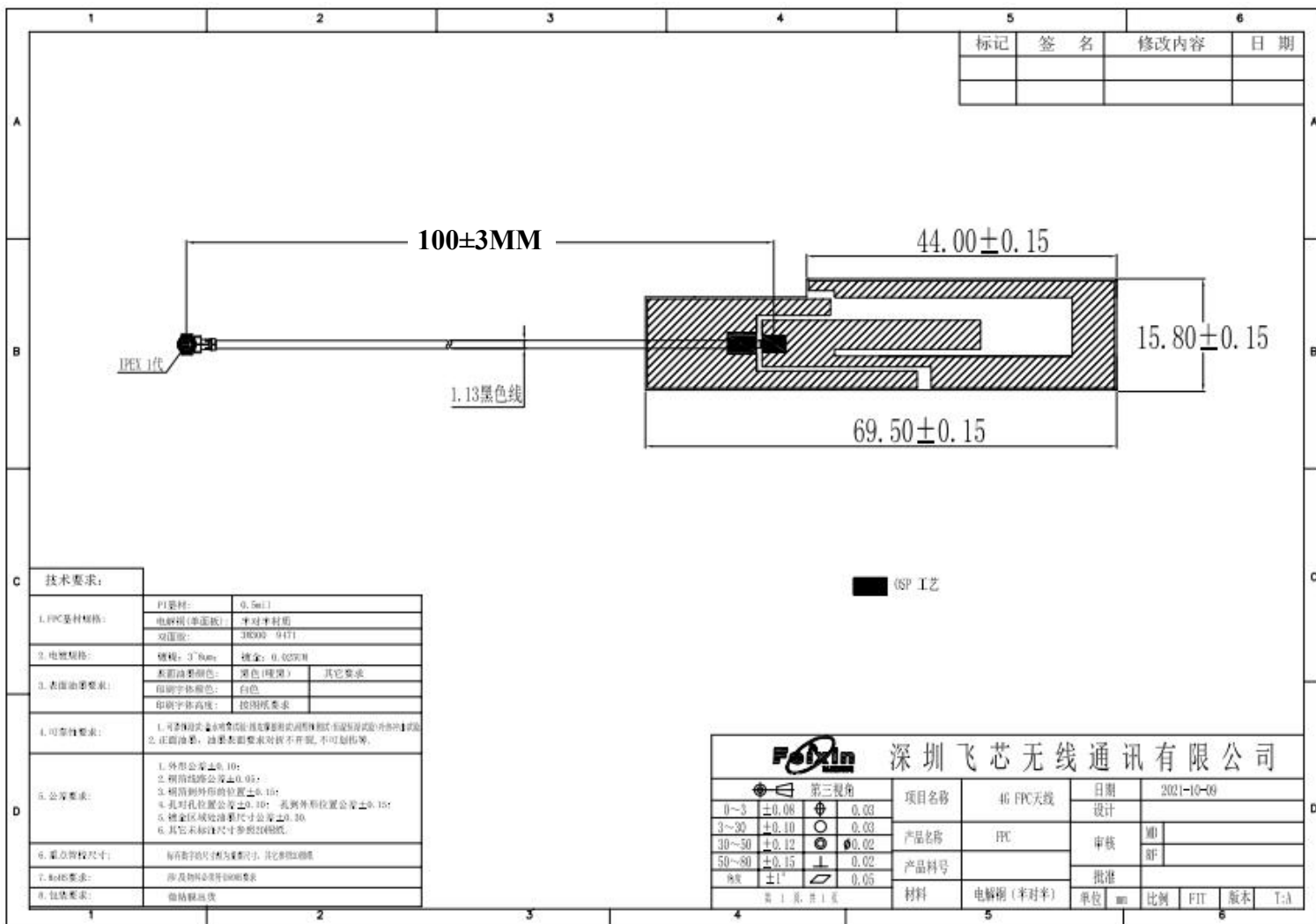
Address: 305, Building A, Changjing Robot Industrial Park, 104 Huanguan Middle Road, Longhua District, Shenzhen City, Guangdong Province

Antenna type : FPC antenna

Freq. (MHz)	TRP (dBm)	Gain (dBi)	Directivity (dBi)	Efficiency (%)	Efficiency (dB)	Max (dBm)	Theta of Max	Phi of Max	Min (dBm)	Theta of Min	Phi of Min	AVG (dBm)	Max/Min (dB)	Max/AVG (dB)	Min/AVG (dB)
920.0	920.00	1.08	4.43	46.2%	-3.36	1.08	60	330	-10.98	120	180	-3.69	12.06	4.76	-7.30
930.0	930.00	1.08	4.60	44.5%	-3.52	1.08	60	240	-10.63	30	330	-3.89	11.70	4.97	-6.73
940.0	940.00	0.92	4.77	41.2%	-3.85	0.92	60	240	-13.66	30	330	-4.32	14.58	5.24	-9.34
950.0	950.00	0.57	5.04	35.8%	-4.46	0.57	60	240	-17.76	30	330	-5.01	18.33	5.59	-12.75
960.0	960.00	-0.25	4.96	30.1%	-5.22	-0.25	60	240	-20.66	30	330	-5.86	20.40	5.60	-14.80

Product picture





标记	签名	修改内容	日期

技术要求:													
1. FPC基材规格:	<table border="1"> <tr> <td>PI基材:</td> <td>0.5mm</td> </tr> <tr> <td>电解铜(半导电):</td> <td>半对半衬层</td> </tr> <tr> <td>双压层:</td> <td>30002 9471</td> </tr> </table>	PI基材:	0.5mm	电解铜(半导电):	半对半衬层	双压层:	30002 9471						
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电解铜(半导电):	半对半衬层												
双压层:	30002 9471												
2. 电镀规格:	<table border="1"> <tr> <td>规格:</td> <td>3~8um</td> <td>镀金:</td> <td>0.05um</td> </tr> </table>	规格:	3~8um	镀金:	0.05um								
规格:	3~8um	镀金:	0.05um										
3. 表面油漆要求:	<table border="1"> <tr> <td>表面油漆颜色:</td> <td>黑色(哑光)</td> <td>其它要求:</td> <td> </td> </tr> <tr> <td>印刷字体颜色:</td> <td>白色</td> <td> </td> <td> </td> </tr> <tr> <td>印刷字体高度:</td> <td>按图纸要求</td> <td> </td> <td> </td> </tr> </table>	表面油漆颜色:	黑色(哑光)	其它要求:		印刷字体颜色:	白色			印刷字体高度:	按图纸要求		
表面油漆颜色:	黑色(哑光)	其它要求:											
印刷字体颜色:	白色												
印刷字体高度:	按图纸要求												
4. 可靠性要求:	1. 可靠性试验: 6个月, 试验后外观无异常, 且电性能符合设计要求。 2. 正偏电压, 过压表面要求对接不开裂, 不可起翘等。												
5. 公差要求:	1. 外形公差±0.10; 2. 槽位公差±0.05; 3. 槽位到外形的距离±0.10; 4. 孔距公差±0.10; 此到外形位置公差±0.15; 5. 镀金区域边缘厚度公差±0.10; 6. 其它未标注尺寸参照图纸。												
6. 备注标注尺寸:	所有数字标注均为公制尺寸, 其它参照图纸。												
7. 包装要求:	按物料清单要求。												
8. 包装要求:	防静电包装。												

第三视角		项目名称	4G FPC天线	日期	2021-10-09	
0~3	±0.08	产品名称	FPC	审核	MM	
3~30	+0.10					RF
30~50	+0.12					
50~80	±0.15	产品料号	批准			
精度	±1°			材料	电解铜(半对半)	单位
第 1 页, 共 1 页		比例	FIT	版本	T:A	

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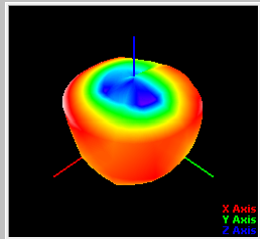
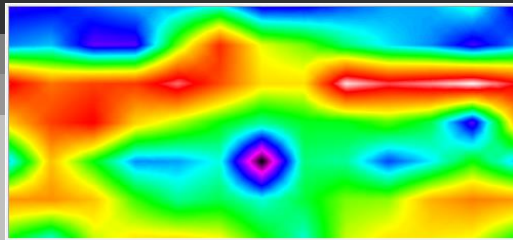
Passive -Freq 920.00MHz

	0	30	60	90	120	150	180	210	240	270	300	330	360
H+V Total (90° Step)	0	-8.17	-8.06	-7.48	-6.89	-6.31	-5.73	--	--	--	--	--	--
	30	-7.20	-6.83	-6.54	-6.45	-6.20	-6.34	-3.58	-4.26	-5.85	-6.59	-7.13	-8.36
	60	-0.29	-1.79	-1.22	-1.10	0.23	-1.33	-3.07	-3.10	0.92	0.03	0.45	1.08
	90	-2.82	-1.18	-0.42	-2.91	-3.88	-4.94	-5.78	-5.13	-5.10	-4.48	-5.36	-8.48
	120	-6.74	-2.74	-4.95	-7.11	-7.02	-6.29	-10.98	-5.64	-5.88	-7.56	-6.55	-4.93
	150	-2.24	-2.15	-2.75	-4.63	-5.81	-5.39	-6.23	-5.28	-4.25	-4.14	-2.56	-1.96
	180	-4.87	-6.16	-3.79	-3.22	-3.16	-3.45	--	--	--	--	--	--

	0	30	60	90	120	150	180	210	240	270	300	330	360
H (30° Step)	0	-11.08	-13.53	-14.52	-16.53	-11.68	-8.52	--	--	--	--	--	--
	30	-10.02	-8.32	-9.66	-10.47	-7.53	-2.34	-6.63	-9.43	-8.10	-7.38	-9.22	-13.77
	60	-0.48	-2.68	-4.78	-4.86	-2.75	-3.71	-5.15	-5.54	0.21	-0.19	0.37	0.70
	90	-9.65	-9.36	-10.21	-10.60	-11.62	-9.25	-9.13	-6.05	-6.61	-8.80	-6.35	-10.75
	120	-13.03	-7.05	-9.91	-7.87	-7.97	-9.15	-12.70	-10.91	-9.19	-9.67	-3.60	-9.91
	150	-2.33	-2.45	-3.19	-5.70	-8.80	-9.40	-8.83	-6.57	-4.55	-4.16	-3.56	-5.36
	180	-4.93	-6.77	-7.33	-10.92	-12.57	-7.03	--	--	--	--	--	--

	0	30	60	90	120	150	180	210	240	270	300	330	360
V (30° Step)	0	-11.29	-9.51	-8.43	-7.50	-8.72	-10.10	--	--	--	--	--	--
	30	-10.42	-12.19	-14.98	-12.75	-7.08	-6.54	-6.55	-5.83	-9.31	-14.33	-11.29	-9.84
	60	-13.99	-9.14	-3.74	-3.48	-2.81	-5.08	-7.27	-6.78	-7.31	-13.03	-16.57	-9.77
	90	-3.83	-1.89	-0.90	-3.72	-4.68	-6.95	-9.56	-12.36	-10.41	-10.29	-12.26	-12.38
	120	-7.90	-4.75	-7.11	-15.07	-14.04	-9.46	-16.85	-7.61	-8.61	-11.70	-10.81	-7.86
	150	-18.88	-13.83	-12.94	-11.25	-8.84	-7.59	-9.70	-11.18	-16.00	-29.25	-9.46	-4.61
	180	-23.60	-14.97	-6.34	-4.02	-3.69	-5.96	--	--	--	--	--	--

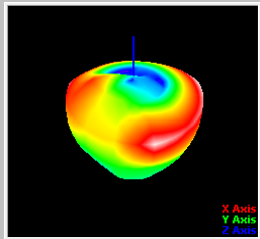
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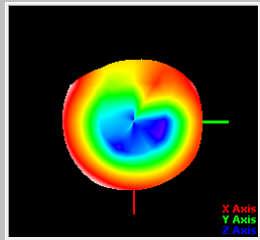
T45-P45



1.08
0.37
-0.34
-1.05
-1.76
-2.47
-3.18
-3.89
-4.6
-5.31
-6.02
-6.73
-7.44
-8.15
-8.86
-9.57
-10.27
-10.98



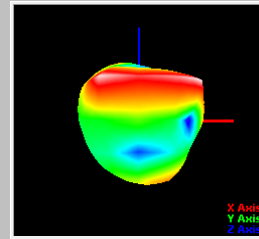
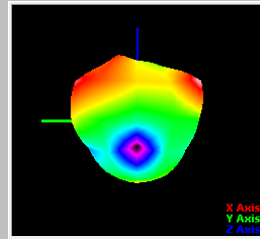
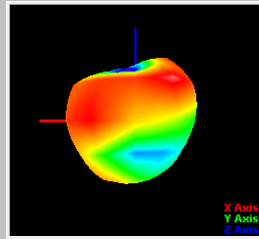
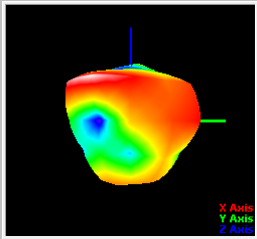
T45-P225



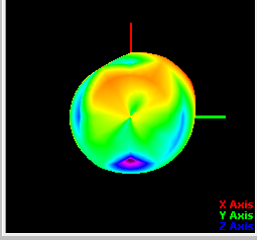
1.08
0.37
-0.34
-1.05
-1.76
-2.47
-3.18
-3.89
-4.6
-5.31
-6.02
-6.73
-7.44
-8.15
-8.86
-9.57
-10.27
-10.98

Coordination System Description:
Line Color XYZ Theta-Phi
Red L. Axis X Theta90-Phi0
Green L. Axis Y Theta90-Phi90
Blue L. Axis Z Theta0

T0-P0



T90-P0



T90-P90



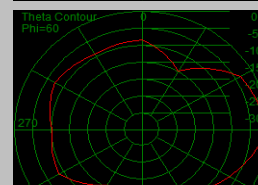
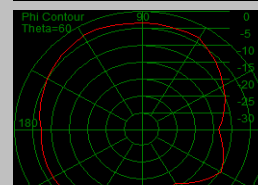
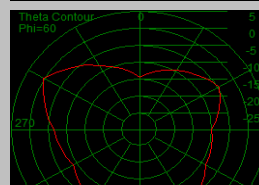
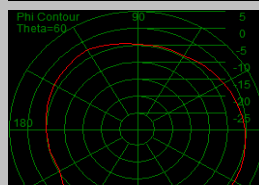
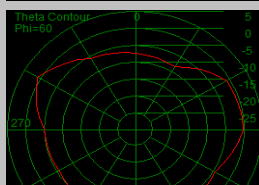
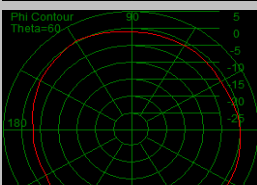
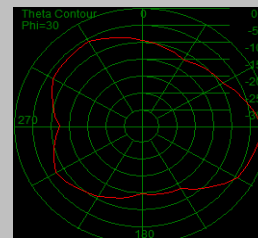
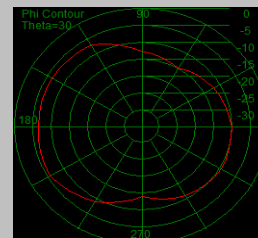
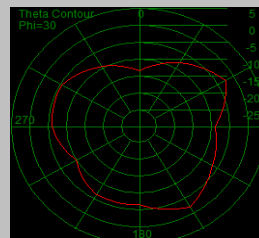
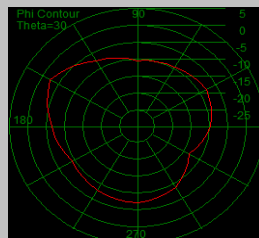
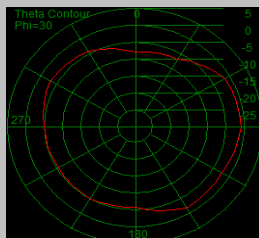
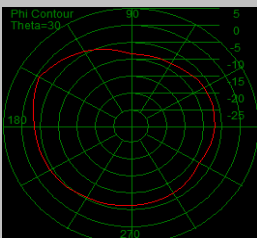
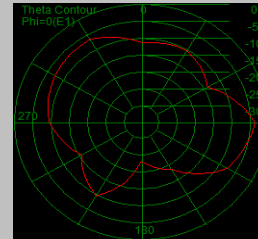
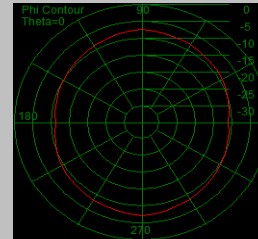
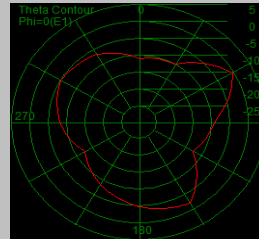
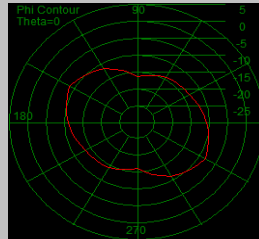
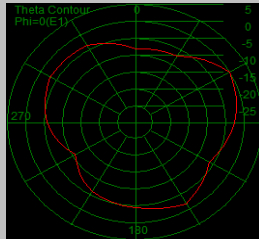
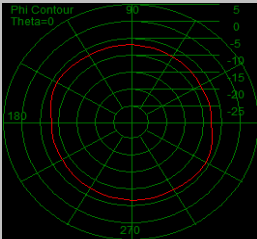
T90-P180



T90-P270



T180-P0



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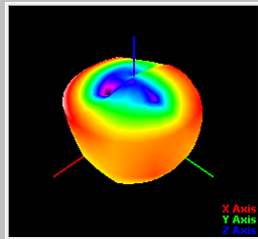
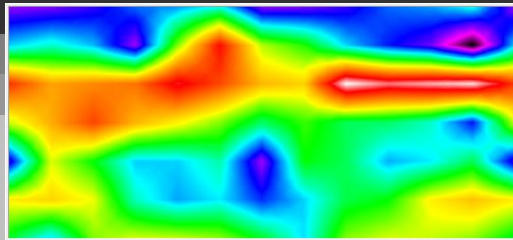
Passive -Freq 930.00MHZ

	0	30	60	90	120	150	180	210	240	270	300	330	360
HxV Total (90° Step)	0	-8.56	-8.43	-8.00	-7.11	-6.81	-6.10	--	--	--	--	--	--
	30	-8.49	-8.55	-8.62	-8.62	-8.95	-9.51	-3.76	-4.61	-6.47	-7.57	-8.33	-10.63
	60	-0.97	-2.29	-1.98	-1.73	-0.19	-1.22	-2.50	-2.80	1.08	0.33	0.64	0.93
	90	-3.61	-2.38	-1.19	-2.47	-3.18	-4.03	-5.33	-4.45	-5.26	-5.36	-5.91	-7.57
	120	-8.05	-3.51	-4.79	-6.51	-6.48	-5.76	-8.62	-4.80	-5.26	-6.68	-6.31	-5.24
	150	-3.14	-2.84	-3.37	-5.89	-6.74	-6.30	-7.45	-6.47	-5.17	-4.78	-3.19	-2.64
	180	-4.97	-6.39	-4.02	-3.55	-3.64	-3.65	--	--	--	--	--	--

	0	30	60	90	120	150	180	210	240	270	300	330	360
H (30° Step)	0	-10.73	-13.06	-14.22	-17.61	-12.49	-8.81	--	--	--	--	--	--
	30	-9.93	-7.75	-8.24	-10.40	-7.31	-1.94	-6.78	-10.07	-8.99	-8.16	-9.90	-16.24
	60	-1.08	-2.96	-5.09	-5.15	-2.97	-3.45	-4.35	-4.97	0.39	0.09	0.56	0.63
	90	-3.71	-11.93	-12.41	-7.34	-8.16	-7.05	-7.00	-5.09	-6.42	-6.60	-6.79	-8.63
	120	-14.49	-7.41	-8.58	-7.43	-7.41	-8.29	-10.01	-8.12	-7.22	-7.91	-7.53	-7.93
	150	-3.17	-3.11	-3.84	-7.07	-10.28	-11.67	-11.48	-8.42	-5.65	-4.79	-4.06	-5.66
	180	-5.20	-6.93	-7.08	-10.22	-12.86	-7.88	--	--	--	--	--	--

	0	30	60	90	120	150	180	210	240	270	300	330	360
V (30° Step)	0	-12.62	-10.26	-9.19	-7.52	-8.18	-9.43	--	--	--	--	--	--
	30	-9.12	-10.65	-11.69	-13.35	-8.62	-6.01	-6.78	-6.68	-10.04	-16.85	-13.51	-12.02
	60	-17.02	-10.26	-4.90	-4.96	-3.44	-5.18	-7.09	-6.86	-7.25	-12.35	-16.49	-10.75
	90	-4.83	-2.89	-1.53	-4.19	-4.84	-7.04	-10.30	-13.12	-11.57	-11.41	-13.30	-14.20
	120	-9.16	-5.77	-7.16	-13.71	-13.60	-9.29	-14.25	-7.53	-9.04	-12.79	-12.40	-9.33
	150	-23.85	-15.00	-13.27	-12.13	-9.28	-7.79	-9.63	-10.89	-14.97	-31.96	-10.59	-5.63
	180	-17.89	-15.69	-6.97	-4.60	-4.20	-6.19	--	--	--	--	--	--

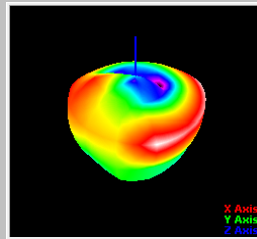
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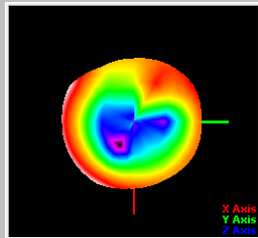
T45-P45



1.08
0.39
-0.3
-0.99
-1.68
-2.37
-3.05
-3.74
-4.43
-5.12
-5.81
-6.5
-7.18
-7.87
-8.56
-9.25
-9.94
-10.63



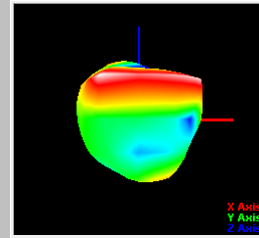
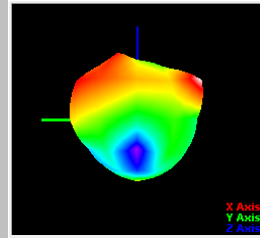
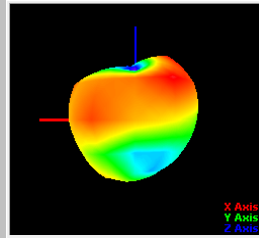
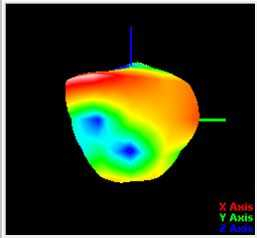
T45-P225



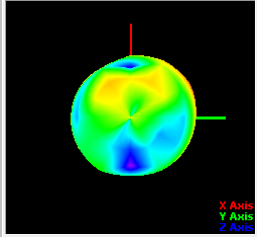
1.08
0.39
-0.3
-0.99
-1.68
-2.37
-3.05
-3.74
-4.43
-5.12
-5.81
-6.5
-7.18
-7.87
-8.56
-9.25
-9.94
-10.63

Coordination System Description:
Line Color XYZ Theta-Phi
Red L. Axis X Theta90-Phi0
Green L. Axis Y Theta90-Phi90
Blue L. Axis Z Theta0

T0-P0



T90-P0



T90-P90



T90-P180



T90-P270



T180-P0

