

东莞市宇程通讯科技有限公司

Dongguan Yucheng Communication Technology Co., LTD

Adress:Room 203, No. 69, Tianxin Road, Qiaotou Town, Dongguan City, Guangdong Province

产品规格书
Product Specification

客户名称 Customer Name: 领势科技(CarShare)

项目名称 Project Name : 2.4-5.8g FPC Antenna

规格描述 Product Spec : YC-A15-2.4_5.8G_3815

版 本 REV : V1.0

日 期 Date : 2024/05/20

制 作 drawing	审 核 check	批 准 approved

客户承认 Customer Approve

审 核 check	批 准 approved	承 认 approval

测试设备及原理 Testing Equipment and Principle

1. 测试设备(Test equipment) :

网络分析仪 Network Analyzers :

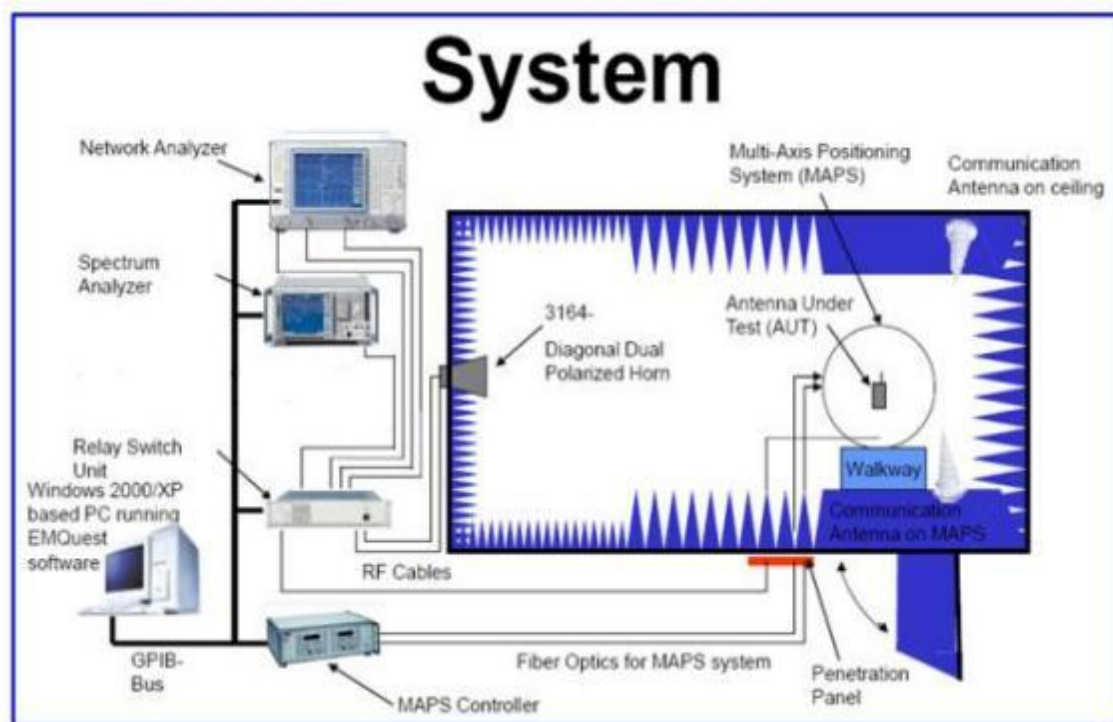
Agilent 8753D 5071B

综合测试仪 Communications Test Set:

Agilent E5515C

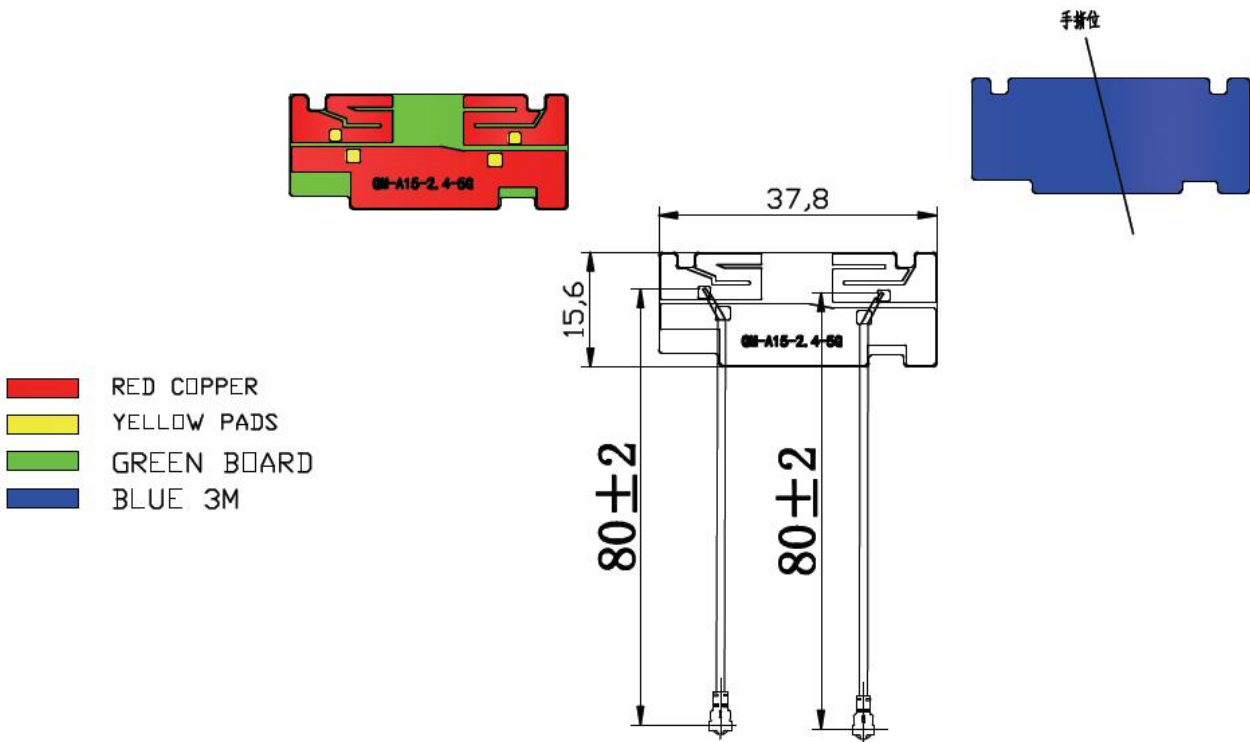
3D 暗室测试系统 3D Chamber Test System :

2. 测试原理(Test principle) :

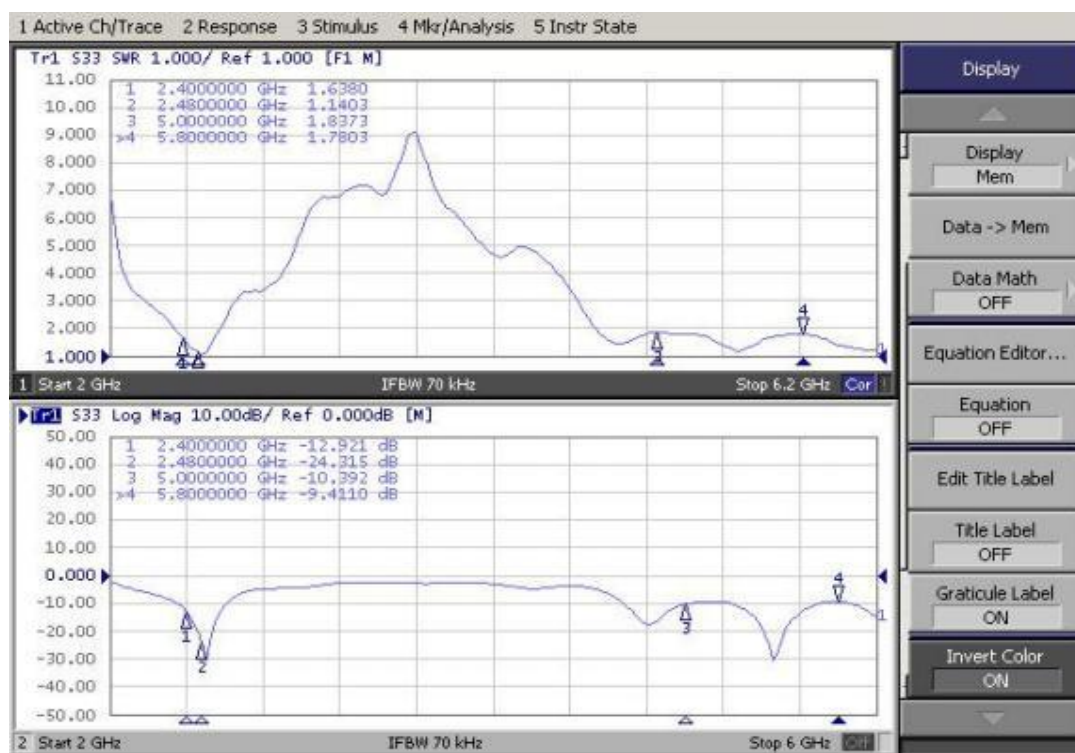


一、电性能以及机械性能

电 性 能 指 标		Electrical Specifications	
频率范围	2400-2500/5100-5850MHZ	Frequency Range	2400-2500/5100-5850MHZ
电压驻波比	≤2.0	VSWR	≤2.0
增益	2.4G≤2.2DBI 5.8G≤4.4DBI	GAIN	2.4G≤2.2DBI 5.8G≤4.4DBI
辐射方式	全向	Radiation	OMNI
极化方式	线性	Polar izatin	LINEAR
输入阻抗	50 Ω	Input Impedance	50 Ω
机 械 指 标		Mechanical Specifications	
接口形式	IPEX-1	Input connector	IPEX-1
工作温度	-30℃~+80℃	Working Temperature	-30℃~+80℃
工作湿度	40~85%	Working Humidity	40~85%



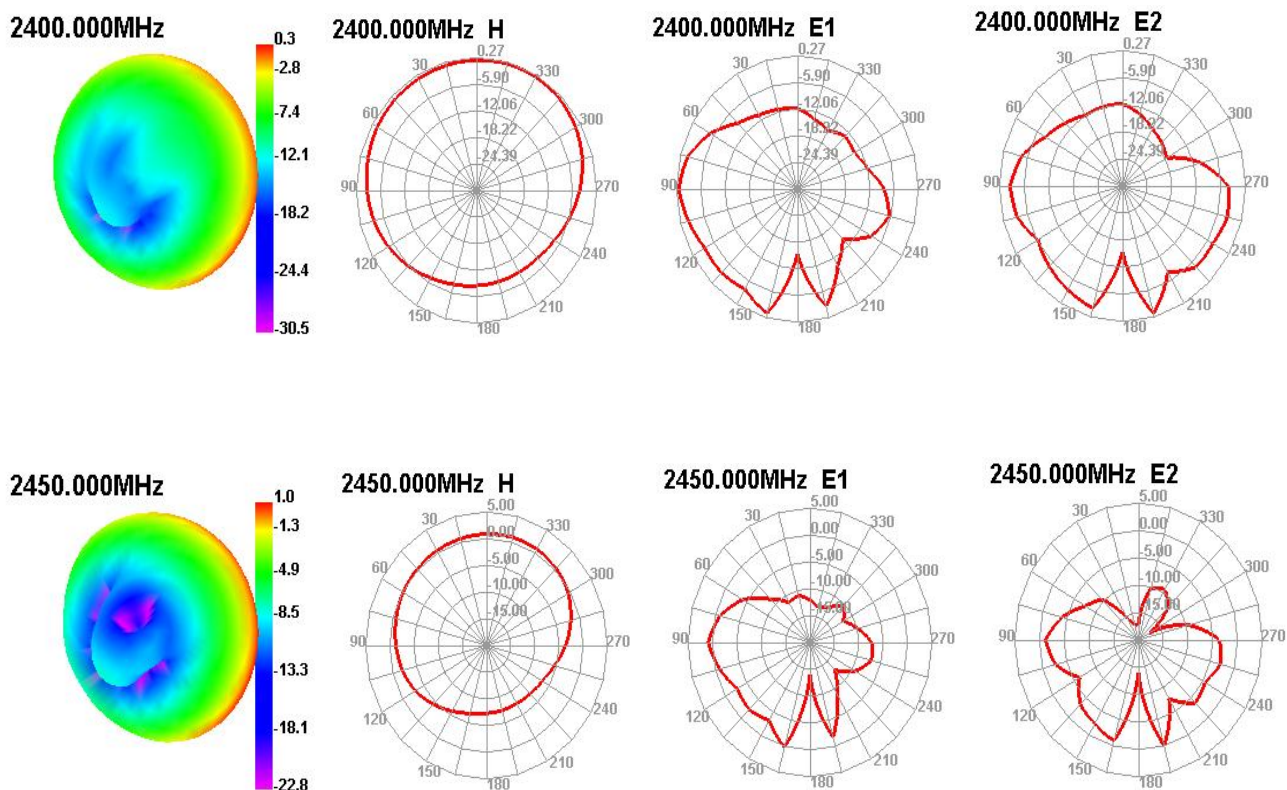
二、无源测试数据(VSWR & S11 test result)



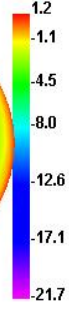
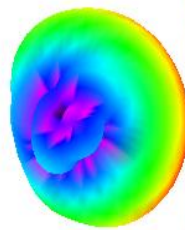
三、增益效率测试数据(Antenna Effi./Gain)

Passive Test For 2.4GWIFI										
Freq (MHz)	Effi (%)	Effi (dB)	Gain (dBi)	Gain (dBd)	UHS (%)	DHIS (%)	Max (dB)	Min (dB)	Attenut Hor	Attenut Ver
2400	29.73	-5.27	0.27	-1.88	9.93	19.796	0.27	-30.55	48.51	48.38
2410	33.84	-4.71	0.77	-1.38	11.189	22.656	0.77	-29.66	48.83	48.65
2420	37.28	-4.29	1.15	-1	12.43	24.846	1.15	-25.68	49.05	49
2430	37.62	-4.25	1.15	-1	12.801	24.822	1.15	-22.5	49.05	48.89
2440	37.78	-4.23	1.2	-0.95	13.06	24.716	1.2	-20.96	49.08	48.97
2450	35.35	-4.52	1.04	-1.11	12.265	23.088	1.04	-22.85	49.01	48.85
2460	33.22	-4.79	0.93	-1.22	11.36	21.861	0.93	-25.77	48.86	48.7
2470	30.92	-5.1	0.85	-1.3	10.355	20.564	0.85	-26.66	48.86	48.78
2480	32.1	-4.93	1.15	-1	10.556	21.548	1.15	-25.23	49.29	49.19
2490	32.95	-4.82	1.41	-0.74	10.823	22.125	1.41	-22.19	49.92	49.75
2500	31.29	-5.05	1.2	-0.95	10.382	20.906	1.2	-21.72	49.95	49.77

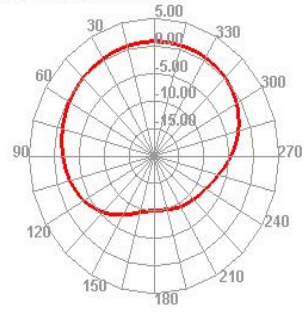
2.4 G 3D/2D pattern



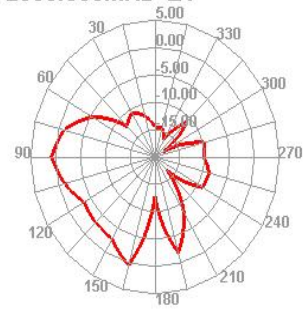
2500.000MHz



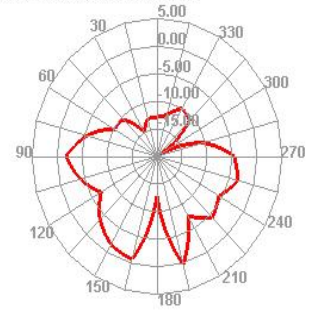
2500.000MHz H



2500.000MHz E1



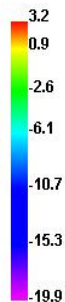
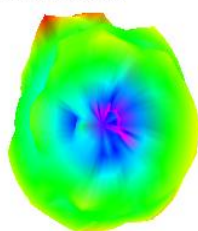
2500.000MHz E2



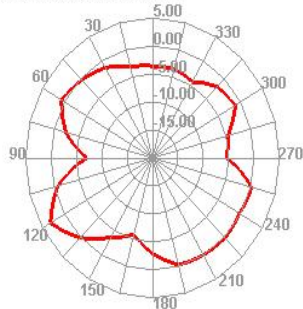
Freq (MHz)	EIR1 (%)	EIR1 (dB)	Gain (dBi)	Gain (dBd)	OHIS (%)	OHIS (%)	Max (dB)	Min (dB)	Attenut Hor	Attenut Ver
5010	60.27	-2.2	3.18	1.03	25.967	34.303	3.18	-19.94	59.68	58.34
5020	60.66	-2.17	3.22	1.07	26.183	34.475	3.22	-20.68	59.81	58.58
5030	56.92	-2.45	2.91	0.76	24.736	32.185	2.91	-24.54	59.49	58.15
5040	57.75	-2.38	3	0.85	25.178	32.569	3	-30.25	59.39	58.15
5050	54.99	-2.6	2.79	0.64	23.992	30.995	2.79	-22.77	59.32	57.82
5060	56.48	-2.48	2.61	0.46	24.747	31.737	2.61	-20.15	59.55	58.12
5070	56.59	-2.47	2.67	0.52	24.831	31.757	2.67	-19.42	59.4	57.95
5080	57.93	-2.37	2.65	0.5	25.602	32.329	2.65	-18.58	59.54	57.9
5090	57.74	-2.39	2.77	0.62	25.661	32.079	2.77	-21.1	59.62	58.05
5100	57.57	-2.4	3	0.85	25.918	31.653	3	-21.65	59.72	58.13
5110	55.84	-2.53	2.85	0.7	25.278	30.563	2.85	-21.38	59.54	58.18
5120	53.21	-2.74	2.68	0.53	24.308	28.906	2.68	-19.1	59.21	57.74
5130	54.13	-2.67	2.55	0.4	25.016	29.119	2.55	-18.77	59.39	57.64
5140	53.26	-2.74	2.38	0.23	24.7	28.562	2.38	-18.62	59.39	58.12
5150	53.46	-2.72	2.48	0.33	25.002	28.456	2.48	-20.73	59.38	58.04
5160	49.84	-3.02	2.16	0.01	23.395	26.443	2.16	-19.77	58.97	57.67
5170	49.91	-3.02	2.4	0.25	23.575	26.333	2.4	-23.08	58.83	57.73
5180	47.67	-3.22	2.18	0.03	22.775	24.894	2.18	-24.84	58.83	57.58
5190	49.27	-3.07	2.42	0.27	23.691	25.578	2.42	-20.59	58.82	57.66
5200	48.05	-3.18	2.3	0.15	23.359	24.693	2.3	-17.83	58.96	58.14
5210	51.96	-2.84	2.24	0.09	25.619	26.343	2.24	-16	59.18	57.88
5220	50.69	-2.95	1.99	-0.16	25.171	25.52	1.99	-17.48	59.19	58.53
5230	53.58	-2.71	2.11	-0.04	26.817	26.76	2.11	-17.47	59.54	58.57
5240	51.77	-2.86	2.1	-0.05	26.247	25.521	2.1	-18.24	59.48	58.72
5250	51.18	-2.91	1.92	-0.23	26.147	25.034	1.92	-18.35	59.43	58.63
5260	51.47	-2.88	2.14	-0.01	26.649	24.826	2.14	-20.26	59.35	58.74
5270	50.6	-2.96	2.2	0.05	26.493	24.111	2.2	-18.24	59.12	58.19
5280	52.29	-2.82	2.41	0.26	27.512	24.773	2.41	-15.51	59.19	58.46
5290	56.38	-2.49	2.75	0.6	29.891	26.486	2.75	-17.14	59.58	59.01
5300	52.45	-2.8	2.42	0.27	28.027	24.422	2.42	-18.2	59.57	58.89
5310	51.13	-2.91	2.1	-0.05	27.412	23.722	2.1	-17.95	59.46	58.71
5320	54.38	-2.65	2.3	0.15	29.36	25.021	2.3	-17.96	59.68	59.26
5330	53.53	-2.71	2.06	-0.09	29.049	24.48	2.06	-17.26	59.58	58.77
5340	55.42	-2.56	2.38	0.23	30.318	25.102	2.38	-18.02	59.68	59.41
5350	55.72	-2.54	2.6	0.45	30.615	25.104	2.6	-17.26	59.83	58.98
5360	54.31	-2.65	2.41	0.26	29.93	24.377	2.41	-16.1	59.37	59.09
5370	54.01	-2.68	2.27	0.12	29.72	24.289	2.27	-17.09	59.31	58.77
5380	53.26	-2.74	2.01	-0.14	29.361	23.9	2.01	-17.63	59.06	58.97
5390	49.82	-3.03	1.45	-0.7	27.484	22.34	1.45	-17.88	59.05	58.49
5400	61.67	-2.1	2.47	0.32	34.2	27.468	2.47	-18.89	59.79	59.34
5410	59.49	-2.26	2.54	0.39	32.946	26.549	2.54	-20.08	59.73	59.45
5420	58.36	-2.34	2.54	0.39	32.49	25.867	2.54	-19.96	59.76	59.06
5430	57.48	-2.41	2.23	0.08	31.907	25.571	2.23	-22.34	59.9	59.4
5440	57.97	-2.37	2.17	0.02	32.183	25.788	2.17	-21.93	60.11	59.59
5450	54.43	-2.64	1.93	-0.22	30.1	24.335	1.93	-22.36	60.24	59.48
5460	57.59	-2.4	2.32	0.17	31.685	25.904	2.32	-22.43	60.42	60.47
5470	56.31	-2.49	2.35	0.2	31.036	25.277	2.35	-23.93	60.51	59.41
5480	58.31	-2.34	2.64	0.49	32.017	26.298	2.64	-20.71	60.54	59.7
5490	58.55	-2.32	2.67	0.52	32.117	26.43	2.67	-21.69	60.73	59.93
5500	60.7	-2.17	2.84	0.69	33.23	27.468	2.84	-15.63	60.9	60.27
5510	58.62	-2.32	2.52	0.37	32.028	26.595	2.52	-16.95	60.91	60.24
5520	58.76	-2.31	2.69	0.54	31.793	26.965	2.69	-15.64	61.27	60.53
5530	59.01	-2.29	2.83	0.68	31.907	27.104	2.83	-15.2	61.36	60.87
5540	63.46	-1.98	3.49	1.34	34.137	29.32	3.49	-14.65	61.9	61.35
5550	64.2	-1.92	3.64	1.49	34.598	29.597	3.64	-16.73	61.98	61.21
5560	66.07	-1.8	3.81	1.66	35.447	30.62	3.81	-15.35	62.08	61.58
5570	63.36	-1.98	3.53	1.38	34.086	29.27	3.53	-17.32	62.09	61.09
5580	64.13	-1.93	3.46	1.31	34.353	29.776	3.46	-17.85	62.2	62.02
5590	59.63	-2.25	3.05	0.9	32.129	27.504	3.05	-18.4	62.41	61.07
5600	61.71	-2.1	3.5	1.35	33.117	28.597	3.5	-16.5	62.08	61.71
5610	62.75	-2.02	3.89	1.74	33.36	29.386	3.89	-20.18	62.3	61.69
5620	64.29	-1.92	4.33	2.18	34.148	30.139	4.33	-15.17	62.02	61.39
5630	63.47	-1.97	4.23	2.08	33.719	29.752	4.23	-15.62	62	61.28
5640	64.14	-1.93	4.33	2.18	33.992	30.153	4.33	-14.73	62.17	61.42
5650	63.24	-1.99	4.19	2.04	33.453	29.787	4.19	-15.7	62.28	61.38
5660	65.46	-1.84	4.18	2.03	34.285	31.176	4.18	-15.47	62.28	62.35
5670	64.6	-1.9	4.15	2	33.834	30.765	4.15	-16.66	62.29	61.27
5680	65.17	-1.86	4.25	2.1	33.782	31.39	4.25	-16.38	62.3	61.84
5690	67.44	-1.71	4.69	2.54	34.686	32.757	4.69	-15.1	62.3	61.49
5700	68.31	-1.65	4.85	2.7	34.834	33.481	4.85	-14.57	62.34	62.11
5710	63.71	-1.96	4.5	2.35	32.374	31.339	4.5	-14.79	61.91	61.47
5720	63.25	-1.99	4.39	2.24	32.094	31.159	4.39	-16.24	61.64	61.14
5730	63.93	-1.94	4.02	1.87	32.219	31.716	4.02	-15.49	61.81	61.49
5740	64.85	-1.88	4.08	1.93	32.339	32.512	4.08	-15.17	62.2	61.38
5750	65.38	-1.85	4.17	2.02	32.265	33.118	4.17	-14.77	61.91	62.1
5760	66.41	-1.78	4.25	2.1	32.523	33.886	4.25	-14.37	62.13	61.49
5770	63.46	-1.97	3.97	1.82	30.836	32.628	3.97	-14.62	61.66	61.66
5780	60.95	-2.15	3.96	1.81	29.364	31.585	3.96	-14.34	61.79	61.4
5790	58.13	-2.36	3.87	1.72	27.847	30.278	3.87	-12.75	61.89	61.27
5800	60.4	-2.19	3.88	1.73	28.809	31.593	3.88	-12.06	61.87	61.75
5850	59.7	-2.24	3.98	1.83	29.087	30.613	3.98	-14.87	61.54	61.32

5G 3D/2D pattern

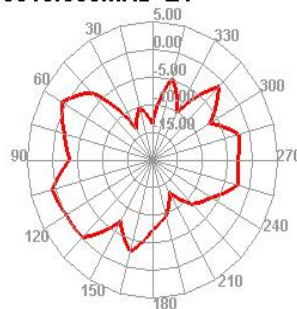
5010.000MHz



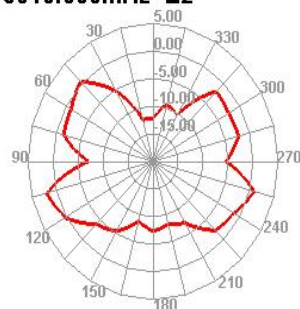
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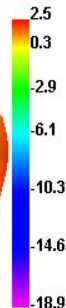
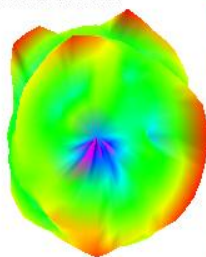
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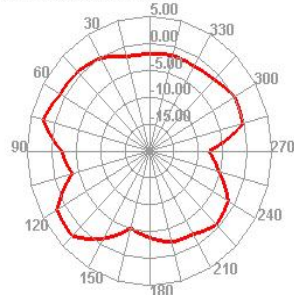
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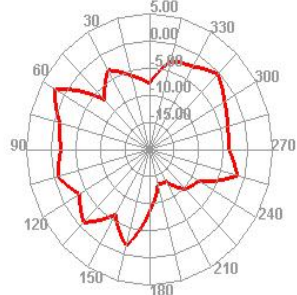
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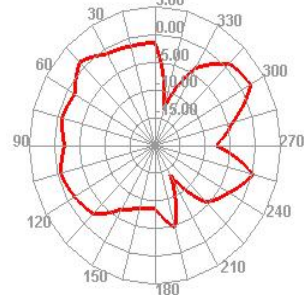
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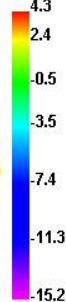
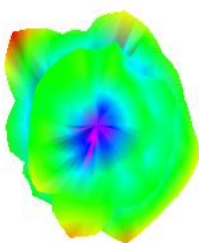
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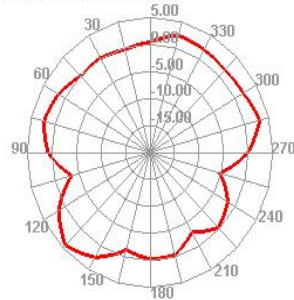
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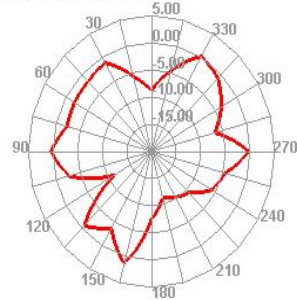
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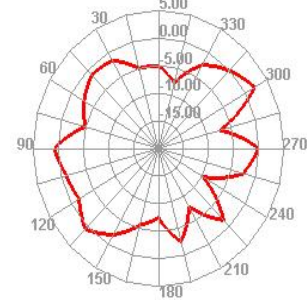
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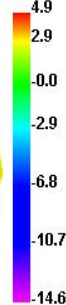
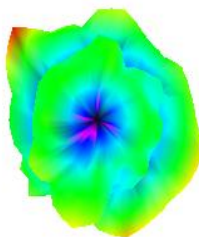
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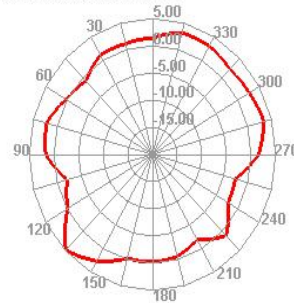
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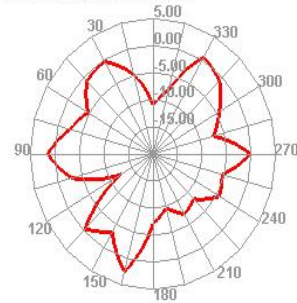
5700.000MHz



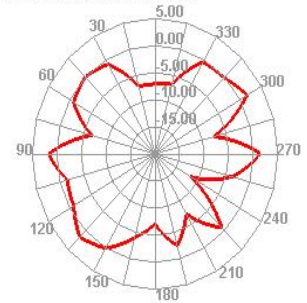
5700.000MHz H



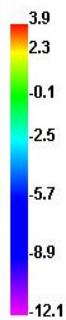
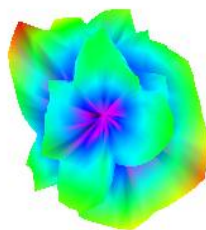
5700.000MHz E1



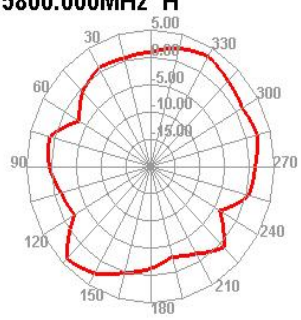
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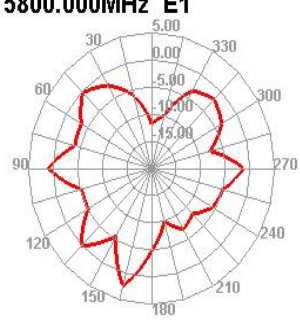
5800.000MHz



5800.000MHz H



5800.000MHz E1



5800.000MHz E2

