WIFI PIFA Antenna Specification

Customer Name:

Customer PN:

LB-LINK PN:

Provide By: Bo li

Checked By: Xing Yu Ding

Date: 2020/05/11

type and specification：PIFA 天线L-2&5G/PIFA 天线R-2&5G

Customer Check By:

Date:

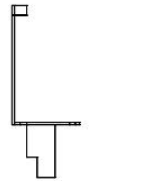
Antenna introducing

- Made by Copper-Nickel-Zinc Alloy material, work in 2.4~2.5GHz &4.9~5.825GHz.
- Design by dipole antenna theory.
- High gain, High efficiency, Good port matching.
- Make wireless equipments better communication.

Antenna useful area

- Pads, note-book, reader and so on.
- IP camera, set top box and so on.
- DVD player, TV and consumer electronics.

Antenna size)



俯视图

仰视图

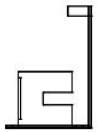
左视图

右视图

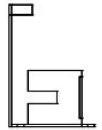
前视图

后视图

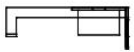
铁件天线1



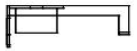
俯视图



仰视图

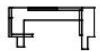


左视图



右视图

前视图



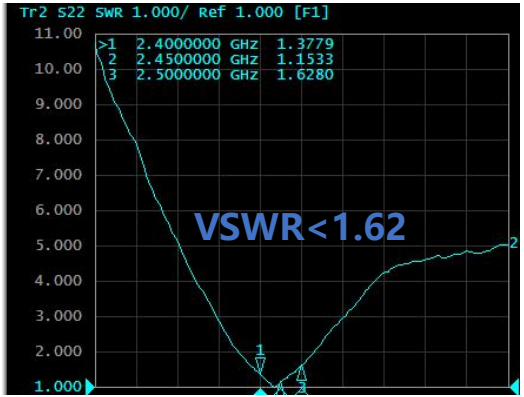
后视图

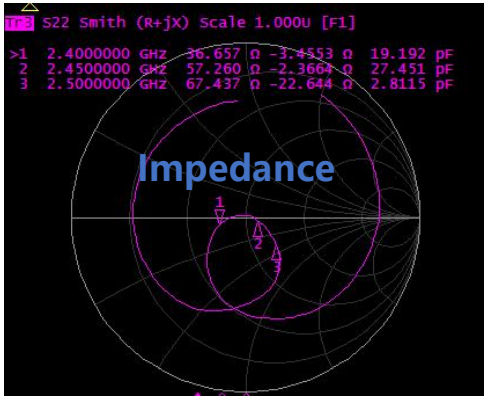
铁件天线2

Antenna electrical properties

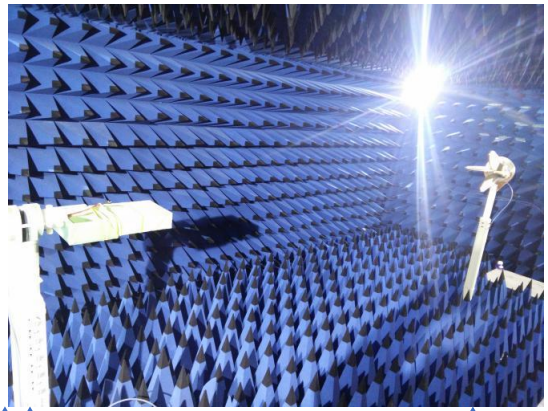
Frequency	2.4~2.5GHz&5.1~5.8GHz
Impedance	50ohm nominal
V.S.W.R	≤1.92
Return loss	≤-10dB
Radiation	Omni-directional
Gain(Peak)	2.4GWIFI:4.67dB/ 5GWIFI:3.36dB Linear
Polarization	
Admitted Power	2W
Connector	IPEX

Antenna S-parameter





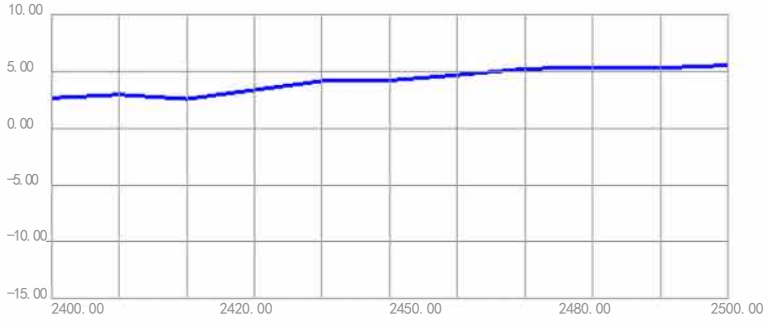
Antenna chamber structure



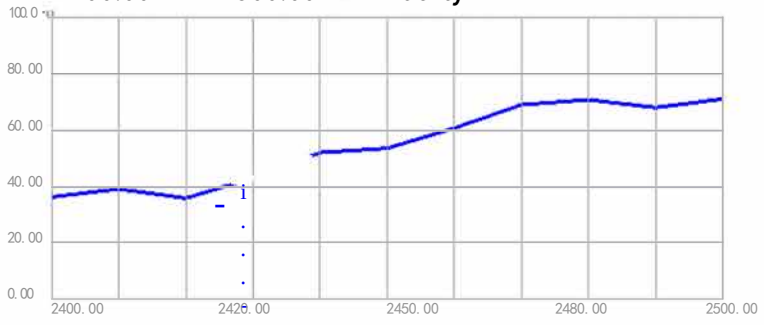
2.4GWIFI-Antenna total gain and efficiency

Passive Test For dipole												
Freq (MHz)	Effi (%)	Effi (dB)	Gain (dBi)	Gain (dBd)	UHIS (%)	DHIS (%)	Max (dB)	Min (dB)	irectivit (dBi)	Beamwidth (3dB)	AttH (dB)	AttV (dB)
2400	36.28	-4.4	2.65	0.5	12.189	24.093	2.65	-18.81	7.05	0	56.69	56.84
2410	39.1	-4.08	2.94	0.79	13.261	25.842	2.94	-21.24	7.02	0	56.57	56.68
2420	35.86	-4.45	2.57	0.42	12.007	23.854	2.57	-23.95	7.02	0	56.72	56.73
2430	42.99	-3.67	3.36	1.21	14.078	28.909	3.36	-23.64	7.02	0	56.46	56.52
2440	52.01	-2.84	4.14	1.99	16.873	35.141	4.14	-22.35	6.97	0	56.66	56.55
2450	53.53	-2.71	4.2	2.05	17.575	35.956	4.2	-22.41	6.91	0	57.19	57.1
2460	60.67	-2.17	4.67	2.52	20.419	40.25	4.67	-22.64	6.84	0	57.36	57.21
2470	68.97	-1.61	5.21	3.06	23.759	45.207	5.21	-23.48	6.82	0	57.7	57.63
2480	70.72	-1.5	5.36	3.21	24.535	46.188	5.36	-22.43	6.87	0	57.79	57.67
2490	67.97	-1.68	5.28	3.13	23.425	44.543	5.28	-20.68	6.96	0	58.05	57.72
2500	71	-1.49	5.52	3.37	24.214	46.787	5.52	-19.81	7.01	0	58.21	58.1

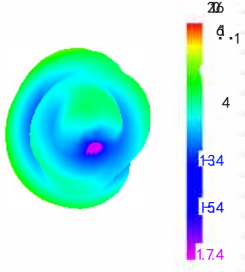
2400.00MHz- 2500.00MHzGain



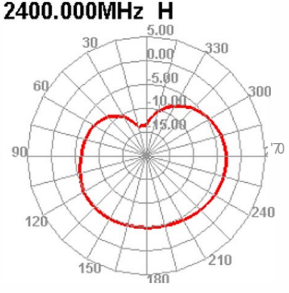
2400.00MHz- 2500.00MHzEfficiency



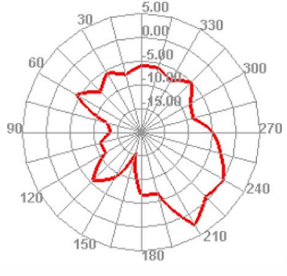
2400.000MHz



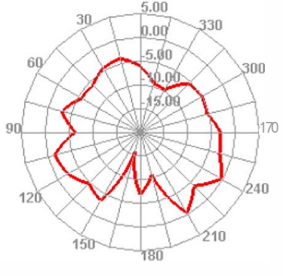
2400.000MHz H



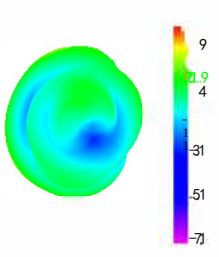
2400.000MHz E1



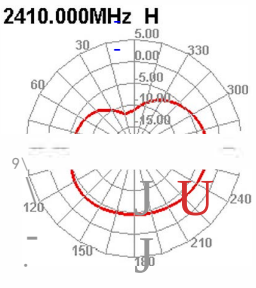
2400.000MHz E2



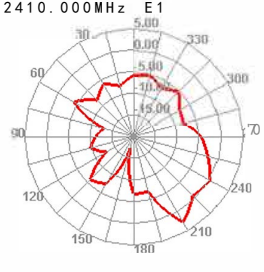
2410.000MHz



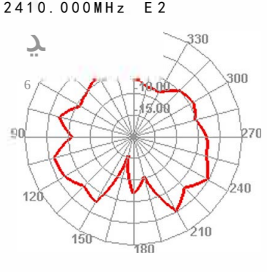
2410.000MHz H



2410.000MHz E1



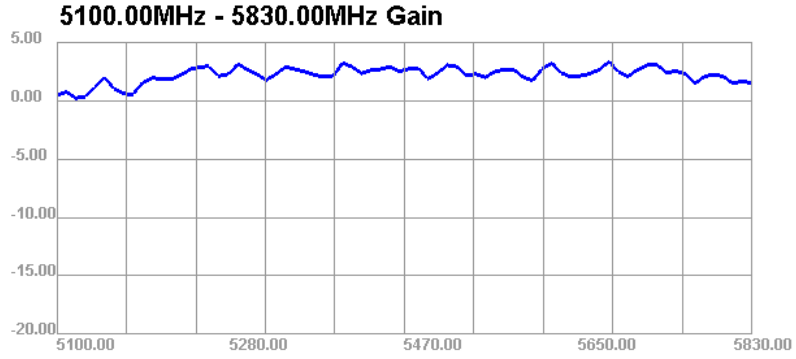
2410.000MHz E2



5GWIFI-Antenna total gain and efficiency

Passive Test For dipole												
Freq (MHz)	Effi (%)	Effi (dB)	Gain (dBi)	Gain (dBd)	UHIS (%)	DHIS (%)	Max (dB)	Min (dB)	irectivit (dBi)	Beamwidth (3dB)	AttH (dB)	AttV (dB)
5100	50.83	-2.94	0.49	-1.66	28.847	21.983	0.49	-18.56	3.43	45	66.79	67.07
5110	53.27	-2.74	0.75	-1.4	30.042	23.228	0.75	-18.95	3.48	45	67.23	67.02
5120	45.88	-3.38	0.22	-1.93	25.617	20.264	0.22	-21.35	3.6	45	66.4	66.38
5130	46.48	-3.33	0.36	-1.79	25.693	20.783	0.36	-22.01	3.69	45	67.24	67.21
5140	55.24	-2.58	1.19	-0.96	30.14	25.1	1.19	-21.69	3.77	45	67.43	67.08
5150	64.67	-1.89	1.95	-0.2	35.05	29.621	1.95	-20.43	3.85	45	67.85	68.03
5160	51.67	-2.87	1.04	-1.11	27.861	23.804	1.04	-21.62	3.91	45	67.18	66.57
5170	45.1	-3.46	0.59	-1.56	24.241	20.854	0.59	-20.71	4.05	45	66.69	66.65
5180	44.61	-3.51	0.57	-1.58	23.901	20.707	0.57	-20.89	4.07	45	66.87	66.25
5190	53.8	-2.69	1.53	-0.62	28.596	25.206	1.53	-20.64	4.22	45	66.66	66.42
5200	56.79	-2.46	1.94	-0.21	29.876	26.919	1.94	-20.48	4.4	45	66.71	66.36
5210	54.33	-2.65	1.87	-0.28	28.38	25.951	1.87	-21.1	4.52	45	66.58	66.2
5220	52.7	-2.78	1.81	-0.34	27.317	25.383	1.81	-20.82	4.6	60	66.51	66.28
5230	53.88	-2.69	2.19	0.04	27.65	26.232	2.19	-22.68	4.88	60	67.2	66.48
5240	59.19	-2.28	2.68	0.53	30.232	28.96	2.68	-21.56	4.96	60	66.96	66.87
5250	60.36	-2.19	2.88	0.73	30.589	29.768	2.88	-20.77	5.07	60	67.33	66.57
5260	60.01	-2.22	2.95	0.8	30.237	29.771	2.95	-21.59	5.16	60	66.86	66.53
5270	48.92	-3.1	2.11	-0.04	24.607	24.316	2.11	-20.99	5.22	30	66.6	65.97
5280	50.94	-2.93	2.26	0.11	25.506	25.433	2.26	-20.64	5.19	30	66.34	65.8
5290	59.22	-2.28	3.13	0.98	29.551	29.666	3.13	-19.93	5.4	30	67.22	66.88
5300	52.59	-2.79	2.68	0.53	26.101	26.493	2.68	-18.39	5.47	30	66.94	66.21
5310	47.13	-3.27	2.26	0.11	23.255	23.877	2.26	-20.41	5.52	30	66.68	66.36
5320	41.71	-3.8	1.78	-0.37	20.411	21.304	1.78	-19.75	5.58	30	67.64	66.82
5330	45.2	-3.45	2.26	0.11	22.013	23.184	2.26	-19.87	5.71	30	66.72	66.32
5340	52.15	-2.83	2.88	0.73	25.3	26.849	2.88	-19.38	5.71	30	67.51	66.68
5350	50.59	-2.96	2.68	0.53	24.441	26.152	2.68	-19.47	5.64	30	66.69	66.22
5360	46.4	-3.33	2.51	0.36	22.285	24.113	2.51	-19.98	5.85	30	67.56	66.96
5370	44	-3.57	2.21	0.06	20.961	23.038	2.21	-19.14	5.77	30	67.3	66.27
5380	42.34	-3.73	2.05	-0.1	20.044	22.297	2.05	-19.61	5.78	45	67.17	66.7
5390	41.7	-3.8	2.08	-0.07	19.533	22.164	2.08	-19.61	5.88	45	67.31	66.36
5400	54.22	-2.66	3.24	1.09	25.246	28.973	3.24	-18.42	5.9	45	67.51	66.82
5410	49.63	-3.04	2.91	0.76	22.871	26.763	2.91	-18.04	5.95	45	68.75	67.79
5420	43.09	-3.66	2.35	0.2	19.765	23.321	2.35	-17.88	6	45	67.96	66.94
5430	45.19	-3.45	2.61	0.46	20.527	24.665	2.61	-17.6	6.06	45	68.82	67.75
5440	47.81	-3.2	2.69	0.54	21.529	26.282	2.69	-17.62	5.89	45	67.82	66.64
5450	49.76	-3.03	2.92	0.77	22.114	27.643	2.92	-17.01	5.95	45	68.29	67.28
5460	45.53	-3.42	2.52	0.37	19.991	25.542	2.52	-17.13	5.93	45	68.5	67.26
5470	46.43	-3.33	2.74	0.59	20.033	26.399	2.74	-17.11	6.08	45	68.25	67.14
5480	46.87	-3.29	2.74	0.59	20.016	26.852	2.74	-17.37	6.03	45	68.78	67.35
5490	38.42	-4.15	1.87	-0.28	16.272	22.15	1.87	-18.37	6.03	45	68.17	66.76

Passive Test For dipole												
Freq (MHz)	Effi (%)	Effi (dB)	Gain (dBi)	Gain (dBd)	UHIS (%)	DHIS (%)	Max (dB)	Min (dB)	irectivit (dBi)	Beamwidth (3dB)	AttH (dB)	AttV (dB)
5500	42.64	-3.7	2.35	0.2	17.897	24.739	2.35	-17.51	6.05	45	68.57	67.39
5510	48.4	-3.15	3.05	0.9	20.013	28.384	3.05	-16.2	6.21	45	69.74	68.09
5520	45.53	-3.42	2.91	0.76	18.589	26.94	2.91	-17.33	6.32	45	69.38	68.31
5530	37.45	-4.26	2.18	0.03	15.077	22.378	2.18	-19.12	6.45	45	70.31	68.45
5540	37.68	-4.24	2.27	0.12	14.994	22.688	2.27	-19.11	6.51	45	69.14	67.81
5550	35.38	-4.51	2.02	-0.13	14.047	21.331	2.02	-20.56	6.53	45	69.93	68.43
5560	37.79	-4.23	2.46	0.31	14.934	22.854	2.46	-21.26	6.69	45	69.41	68.04
5570	39.58	-4.03	2.67	0.52	15.599	23.98	2.67	-21.42	6.69	45	70.31	68.86
5580	38.26	-4.17	2.64	0.49	15.048	23.209	2.64	-19.17	6.82	45	69.48	68.13
5590	32.52	-4.88	2	-0.15	12.686	19.838	2	-19.74	6.88	45	69.23	68.15
5600	29.55	-5.29	1.72	-0.43	11.472	18.082	1.72	-19.61	7.01	45	70.04	68.64
5610	37.98	-4.2	2.77	0.62	14.727	23.252	2.77	-16.92	6.97	45	69.42	68.33
5620	42.17	-3.75	3.23	1.08	16.179	25.992	3.23	-16.1	6.98	45	70.14	68.91
5630	34.27	-4.65	2.36	0.21	13.262	21.004	2.36	-17.77	7.01	45	69.07	67.99
5640	30.9	-5.1	2.03	-0.12	11.942	18.962	2.03	-18.27	7.13	45	69.39	68.37
5650	31.83	-4.97	2.14	-0.01	12.271	19.564	2.14	-18.3	7.11	45	69.33	68.04
5660	34.03	-4.68	2.32	0.17	13.143	20.884	2.32	-18.4	7	45	69.43	68.57
5670	36.61	-4.36	2.67	0.52	14.007	22.6	2.67	-18.06	7.03	45	69.25	68.08
5680	43.42	-3.62	3.36	1.21	16.675	26.746	3.36	-17.23	6.98	45	69.19	68.39
5690	36.26	-4.41	2.47	0.32	13.886	22.377	2.47	-18.11	6.87	45	69.39	68.36
5700	33.52	-4.75	2.08	-0.07	12.862	20.659	2.08	-19.09	6.83	45	69.33	68.4
5710	39.29	-4.06	2.65	0.5	15.145	24.141	2.65	-19.74	6.71	45	69.72	68.96
5720	42.89	-3.68	3.03	0.88	16.619	26.267	3.03	-21.49	6.71	45	69.32	68.39
5730	43	-3.67	3.14	0.99	16.679	26.32	3.14	-20.62	6.81	45	69.18	68.36
5740	37.02	-4.32	2.36	0.21	14.519	22.497	2.36	-20.73	6.68	45	69.36	68.29
5750	39.73	-4.01	2.57	0.42	15.588	24.145	2.57	-19.94	6.58	45	69.33	68.71
5760	37.51	-4.26	2.28	0.13	14.768	22.738	2.28	-19.67	6.54	90	69.75	68.77
5770	32.16	-4.93	1.46	-0.69	12.734	19.43	1.46	-19.47	6.39	90	69.14	68.29
5780	36.19	-4.41	2.05	-0.1	14.296	21.898	2.05	-19.3	6.47	90	69.46	68.82
5790	38.5	-4.14	2.25	0.1	15.217	23.287	2.25	-19.16	6.4	90	69.64	68.82
5800	36.45	-4.38	2.07	-0.08	14.444	22.006	2.07	-18.08	6.45	90	70.18	69.71
5810	31.93	-4.96	1.49	-0.66	12.688	19.24	1.49	-18.57	6.45	75	69.96	69.07
5820	34.77	-4.59	1.67	-0.48	13.837	20.933	1.67	-18.3	6.26	90	69.51	69.11
5830	33.66	-4.73	1.52	-0.63	13.397	20.266	1.52	-18.62	6.24	90	69.86	69.1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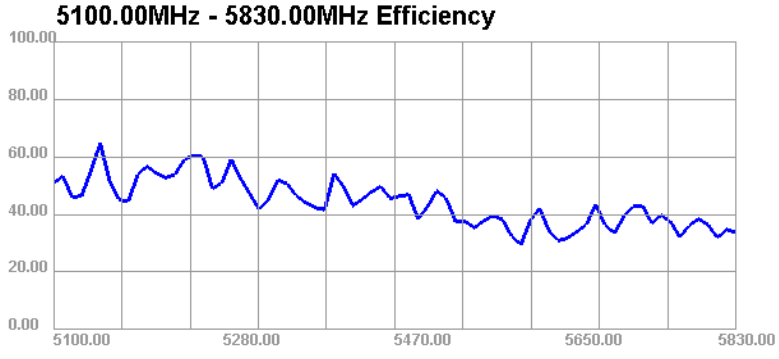
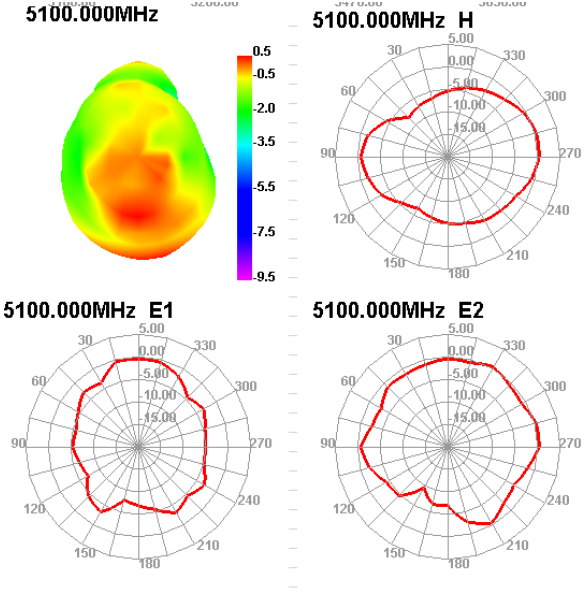
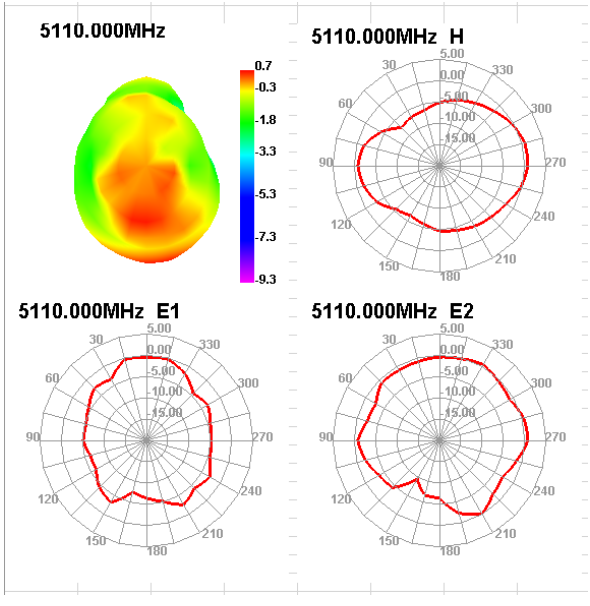
5.00
0.00
-5.00
-10.00
-15.00
-20.00
5100.00
5280.00
5470.00
5650.00
5830.00


5100.00MHz - 5830.00MHz Efficiency
100.00
80.00
60.00
40.00
20.00
0.00
5100.00
5280.00
5470.00
5650.00
5830.00


5100.000MHz
0.5
-0.5
-2.0
-3.5
-5.5
-7.5
-9.5
5100.000MHz H
5100.000MHz E1
5100.000MHz E2


5110.000MHz
0.7
-0.3
-1.8
-3.3
-5.3
-7.3
-9.3
5110.000MHz H
5110.000MHz E1
5110.000MHz E2