

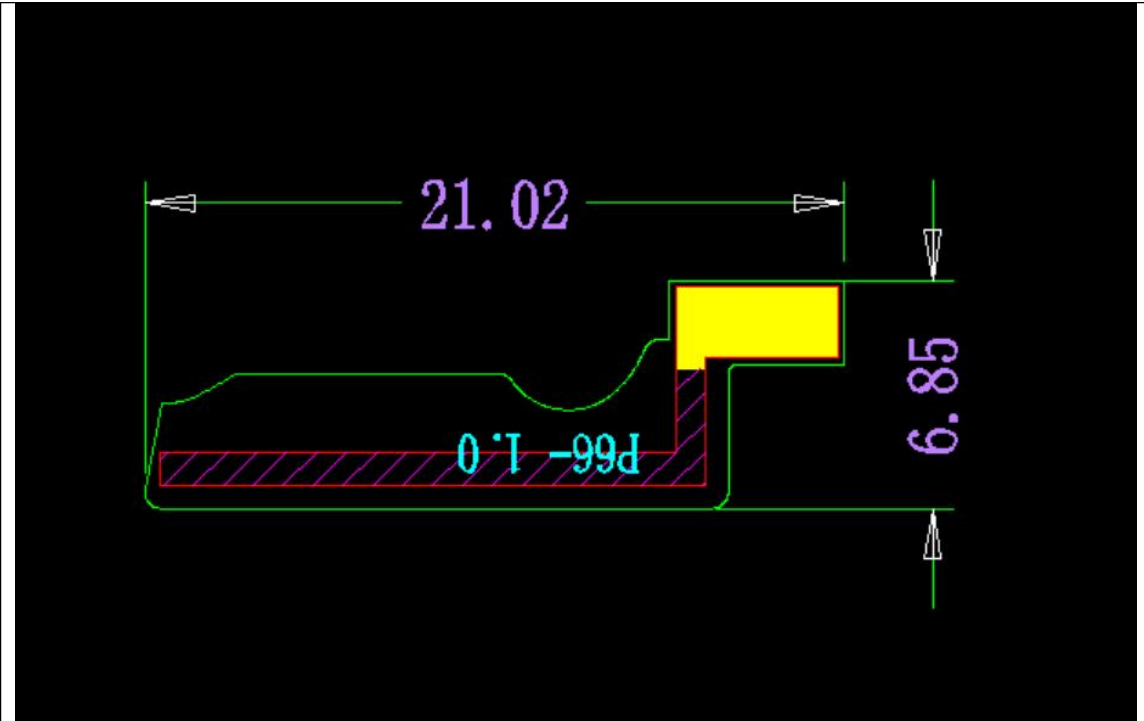
## Antenna Information

Manufacturer	<b>Shenzhen Panlong Communication Technology Co., Ltd.</b>
Antenna Type	Onboard antenna
Antenna Model	FPC antenna
Antenna Part Number	3.30.P66.001
Antenna Frequency Range	2400-2500MHz
Antenna Peak Gain	-5.09dBi
Manufacturer address	201, 2nd Floor, Baisifu Maker, No. 8 North Second Lane, Shiyan Liguang Water Plant, Bao'an District, Shenzhen City

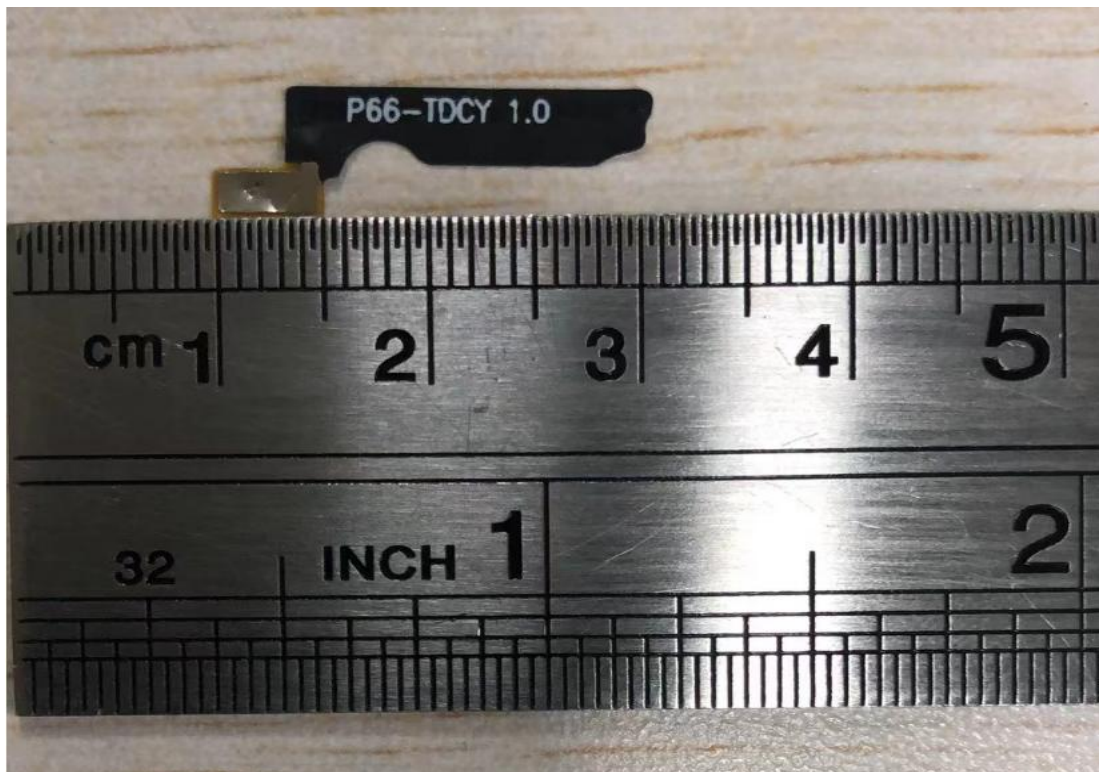
## Antenna Photo



Antenna Top View



With Ruler



Antenna Bottom View [With Ruler]

# Shenzhen Panlong Communication Technology Co., Ltd.

## Antenna Pattern/Gain Measurement data/Table:

Passive -Freq2350.00MHZ														
	0	30	60	90	120	150	180	210	240	270	300	330	360	
H+V Total (30° Step)	0	-8.01	-7.85	-7.86	-7.97	-8.02	-8.09	--	--	--	--	--	--	
	30	-14.70	-14.89	-15.06	-15.09	-14.70	-14.55	-14.71	-14.91	-15.33	-15.14	-14.86	-14.85	
	60	-17.33	-17.91	-14.90	-13.73	-13.73	-15.48	-17.76	-19.93	-16.50	-13.20	-12.75	-14.13	--
	90	-14.65	-15.31	-11.38	-11.44	-12.29	-13.69	-12.57	-15.73	-15.02	-11.67	-10.82	-12.06	--
	120	-11.03	-11.67	-9.82	-9.79	-10.34	-9.62	-8.78	-10.99	-12.25	-10.42	-10.14	-9.80	--
	150	-9.35	-8.76	-9.08	-8.79	-8.41	-7.23	-6.33	-7.49	-8.20	-8.25	-9.82	-9.21	--
180	-36.50	-34.30	-34.61	-34.55	-35.86	-34.10	--	--	--	--	--	--	--	
H (30° Step)	0	-8.78	-8.08	-9.85	-14.64	-18.21	-11.90	--	--	--	--	--	--	
	30	-15.22	-15.09	-17.73	-27.45	-25.25	-18.42	-15.75	-15.26	-17.86	-22.17	-20.67	-17.48	
	60	-21.47	-18.26	-20.17	-30.80	-32.59	-31.65	-23.37	-20.25	-26.12	-22.19	-18.68	-21.38	
	90	-19.25	-15.45	-13.86	-16.91	-24.31	-20.27	-15.38	-15.86	-24.27	-20.86	-16.19	-17.32	
	120	-13.48	-11.71	-12.44	-15.24	-16.08	-12.76	-10.38	-11.05	-15.25	-21.61	-21.30	-14.68	
	150	-11.21	-8.83	-12.99	-22.80	-18.09	-11.09	-6.94	-7.66	-10.99	-18.39	-22.15	-15.92	
180	-38.18	-34.32	-37.32	-47.22	-47.82	-37.49	--	--	--	--	--	--		
V (30° Step)	0	-15.86	-20.74	-12.21	-9.03	-8.46	-10.42	--	--	--	--	--	--	
	30	-24.16	-28.20	-18.44	-15.35	-15.10	-16.84	-21.42	-26.03	-18.89	-16.10	-16.19	-18.27	
	60	-19.45	-29.10	-16.42	-13.81	-13.79	-15.58	-19.15	-31.39	-17.01	-13.79	-14.03	-15.04	
	90	-16.50	-30.13	-14.98	-12.88	-12.57	-14.77	-15.79	-30.88	-15.57	-12.22	-12.31	-13.60	
	120	-14.69	-32.50	-13.26	-11.25	-11.69	-12.50	-13.91	-29.87	-15.28	-10.76	-10.48	-11.50	
	150	-13.93	-26.66	-11.35	-8.97	-8.90	-9.53	-15.17	-21.90	-11.45	-8.69	-10.09	-10.25	
180	-41.46	-57.69	-37.94	-34.79	-36.15	-36.76	--	--	--	--	--	--		

Test Point ID	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)	Mini/AVG (dB)
1	2350.0	2350.00	-6.33	5.36	6.8%	-11.70	-6.33	15000	180	-36.50	18000	0	-11.37	30.17	5.04	-25.13
2	2355.0	2355.00	-6.19	5.30	7.1%	-11.50	-6.19	15000	180	-34.13	18000	9000	-11.13	27.94	4.93	-23.01
3	2360.0	2360.00	-5.77	5.60	7.3%	-11.37	-5.77	15000	180	-32.50	18000	0	-10.97	26.73	5.20	-21.53
4	2365.0	2365.00	-5.61	5.68	7.4%	-11.29	-5.61	15000	180	-32.80	18000	0	-10.85	27.19	5.24	-21.96
5	2370.0	2370.00	-5.35	5.83	7.6%	-11.18	-5.35	15000	180	-33.66	18000	3000	-10.69	28.31	5.34	-22.96
6	2375.0	2375.00	-5.40	5.79	7.6%	-11.19	-5.40	15000	180	-35.39	18000	3000	-10.67	29.99	5.27	-24.72
7	2380.0	2380.00	-5.27	5.81	7.8%	-11.08	-5.27	15000	180	-37.97	18000	0	-10.55	32.70	5.28	-27.42
8	2385.0	2385.00	-5.24	5.64	8.2%	-10.88	-5.24	15000	180	-35.67	18000	0	-10.35	30.44	5.11	-25.33
9	2390.0	2390.00	-5.29	5.56	8.2%	-10.84	-5.29	15000	180	-34.76	18000	0	-10.30	29.47	5.02	-24.45
10	2395.0	2395.00	-5.31	5.43	8.4%	-10.74	-5.31	15000	180	-33.02	18000	6000	-10.22	27.71	4.91	-22.80
11	2400.0	2400.00	-5.36	5.18	8.8%	-10.54	-5.36	15000	180	-35.24	18000	3000	-10.04	29.88	4.88	-25.20
12	2405.0	2405.00	-5.31	5.12	9.1%	-10.43	-5.31	0	0	-36.10	18000	6000	-9.95	30.80	4.64	-26.15
13	2410.0	2410.00	-5.26	4.99	9.4%	-10.25	-5.26	0	0	-37.32	18000	6000	-9.81	32.06	4.55	-27.51
14	2415.0	2415.00	-5.25	4.85	9.8%	-10.10	-5.25	0	0	-37.98	18000	3000	-9.70	32.73	4.45	-28.29
15	2420.0	2420.00	-5.31	4.68	10.0%	-9.99	-5.31	0	0	-36.67	18000	3000	-9.62	31.36	4.31	-27.05
16	2425.0	2425.00	-5.30	4.55	10.3%	-9.85	-5.30	15000	180	-34.79	18000	3000	-9.52	29.49	4.22	-25.27
17	2430.0	2430.00	-5.21	4.40	10.9%	-9.62	-5.21	15000	180	-35.39	18000	6000	-9.34	30.17	4.12	-26.05
18	2435.0	2435.00	-5.14	4.27	11.5%	-9.41	-5.14	15000	180	-37.46	18000	6000	-9.16	32.33	4.03	-28.30
19	2440.0	2440.00	-5.12	4.17	11.8%	-9.29	-5.12	15000	180	-36.86	18000	9000	-9.08	31.74	3.96	-27.79
20	2445.0	2445.00	-5.16	4.02	12.1%	-9.17	-5.16	15000	180	-39.07	18000	9000	-9.00	33.91	3.84	-30.07
21	2450.0	2450.00	-5.17	3.89	12.4%	-9.06	-5.17	15000	180	-36.70	18000	9000	-8.91	31.53	3.74	-27.79
22	2455.0	2455.00	-5.09	3.86	12.7%	-8.96	-5.09	15000	180	-33.76	18000	12000	-8.83	28.67	3.73	-24.93
23	2460.0	2460.00	-5.25	3.69	12.8%	-8.94	-5.25	15000	180	-33.02	18000	9000	-8.83	27.77	3.58	-24.19
24	2465.0	2465.00	-5.38	3.57	12.7%	-8.95	-5.38	15000	180	-32.49	18000	9000	-8.84	27.11	3.46	-23.64
25	2470.0	2470.00	-5.58	3.41	12.6%	-8.99	-5.58	15000	180	-34.23	18000	9000	-8.87	28.66	3.29	-25.37
26	2475.0	2475.00	-5.73	3.47	12.0%	-9.20	-5.73	15000	180	-33.64	18000	9000	-9.06	27.92	3.34	-24.58
27	2480.0	2480.00	-5.89	3.44	11.7%	-9.33	-5.89	0	15000	-32.37	18000	0	-9.19	26.48	3.29	-23.19
28	2485.0	2485.00	-5.83	3.60	11.4%	-9.43	-5.83	0	15000	-30.19	18000	9000	-9.25	24.36	3.43	-20.93
29	2490.0	2490.00	-6.11	3.69	10.5%	-9.80	-6.11	0	15000	-29.66	18000	0	-9.59	23.56	3.48	-20.07
30	2495.0	2495.00	-6.19	3.83	10.0%	-10.02	-6.19	0	0	-30.39	18000	9000	-9.78	24.19	3.58	-20.61
31	2500.0	2500.00	-6.16	4.02	9.6%	-10.17	-6.16	0	15000	-31.30	18000	0	-9.89	25.14	3.73	-21.41



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