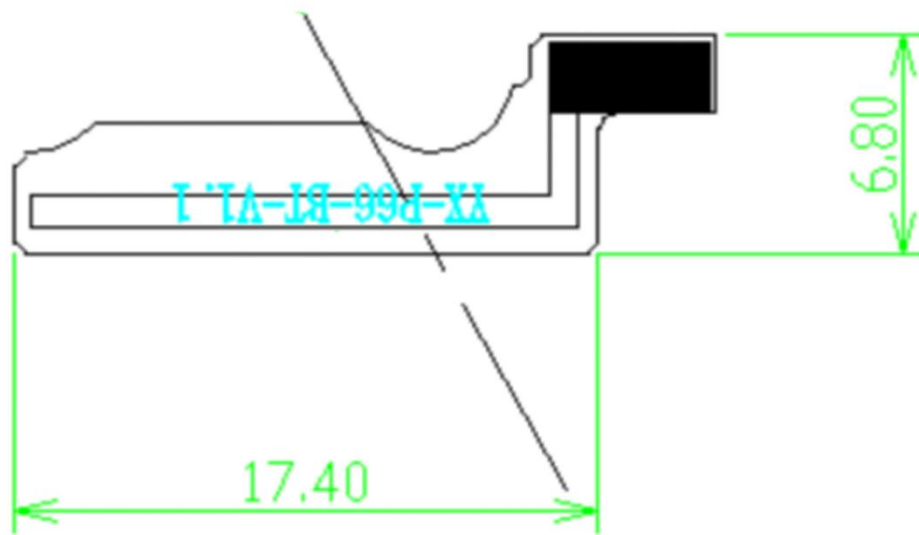


Antenna Information

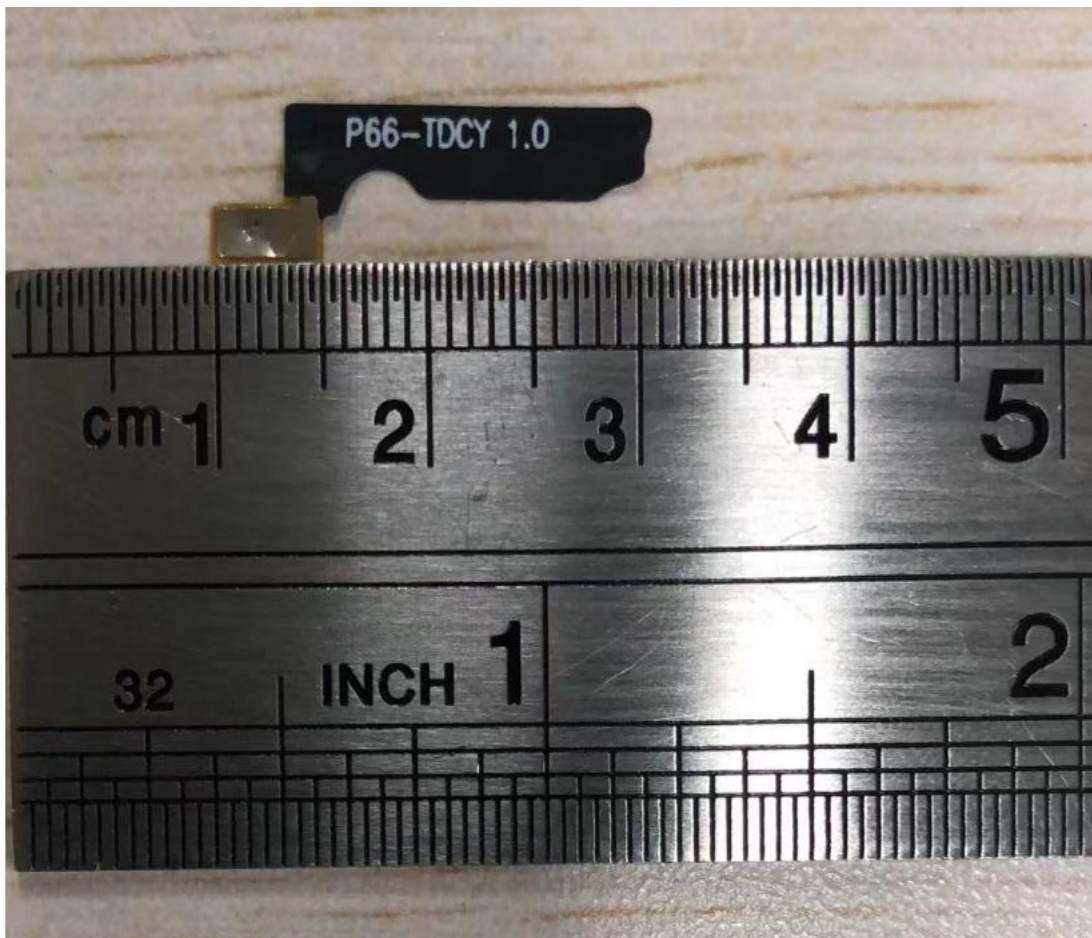
Manufacturer	Shenzhen Panlong Communication Technology Co., Ltd.
Manufacturer Address	201, 2nd Floor, Baisifu Maker, No. 8 North Second Lane, Shiyan Liguang Water Plant, Bao'an District, Shenzhen City
Antenna Type	Onboard antenna
Antenna Model	FPC antenna
Antenna Part Number	3.30.P66.001
Antenna Frequency Range	2400-2500MHz
Antenna Peak Gain	-1.56 dBi
Antenna Dimension (LxHxW)	17.4mm*14.8mm

Antenna Photo





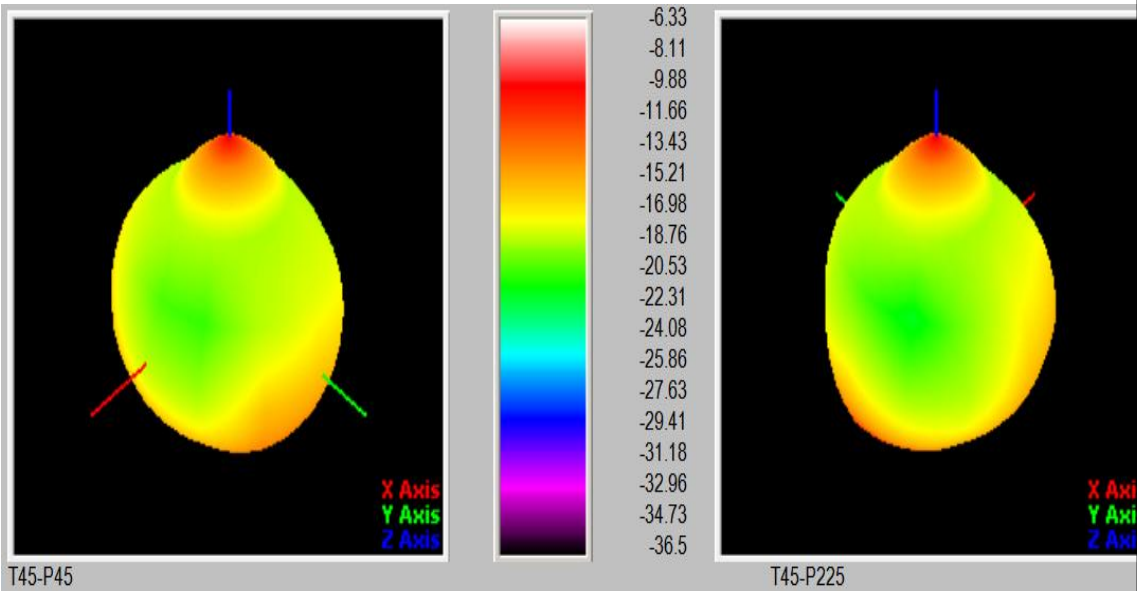
With Ruler]



Antenna Bottom View [With Ruler]

Antenna Pattern/Gain Measurement data/Table:

Example:



Frequency	2.4GHz	2.42GHz	2.44GHz	2.45GHz	2.46GHz	2.48GHz	2.5GHz
Ant. Port Inp. Pow. (dBi)	0	0	0	0	0	0	0
Rad. Pow. (dBi)	-6.13	-5.54	-6.02	-6.17	-6.41	-7.02	-7.79
Rad. Pow. 0-90 (dBi)	-8.91	-8.12	-8.44	-8.51	-8.66	-9.1	-9.76
Rad. Pow. 90-180 (dBi)	-9	-8.66	-9.32	-9.57	-9.91	-10.76	-11.74
Peak EIRP (dBi)	-2.12	-1.56	-2.13	-2.21	-2.4	-2.92	-3.76
Directivity (dBi)	4.01	3.98	3.89	3.96	4.01	4.1	4.03
Efficiency (dB)	-6.13	-5.54	-6.02	-6.17	-6.41	-7.02	-7.79
Efficiency (%)	24.38	27.93	25	24.15	22.86	19.86	16.63
Gain (dBi)	-2.12	-1.56	-2.13	-2.21	-2.4	-2.92	-3.76

Shenzhen Panlong Communication Technology Co., Ltd.

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)	Min/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	4.68	-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

Antenna Pattern/Measurement data