

TEST REPORT

Manufacturer: Quectel

Product OC: Y0TP0CA8BA

Version: 1.0

Date: 2026-03-12

Status: Preliminary

Product Name: FPC GPS/WIFI/BT Antenna

Key Features:

Frequency Band: 1575MHz, 2400-2500MHz, 5150-5850MHz

Dimensions: 42.06 mm× 29.37 mm

Efficiency: Up to 58%

RoHS2.0 and REACH Compliant

**Quectel Global Center: No. 8 Waipojing Road, Sijing Town,
Songjiang District, Shanghai 201601, China**

1 Specification

Test Condition: Assembled in test device

1.1. Electrical

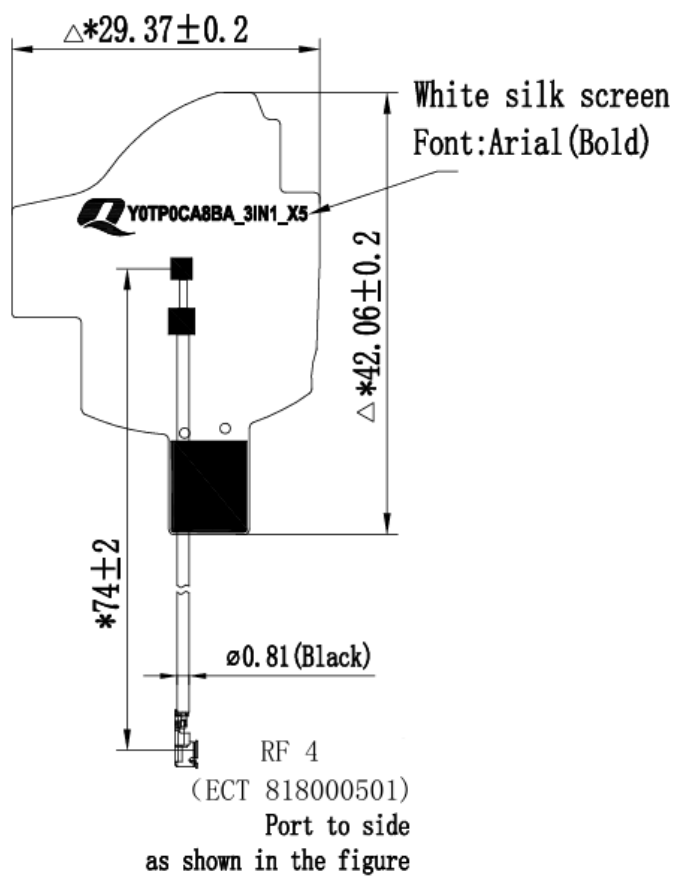
Electrical	
Frequency Range	1575MHz, 2400-2500 MHz, 5150-5850MHz
Impedance	50 Ω
Polarization	Linear
Radiation Pattern	Omni-directional

1.2. Mechanical & Environmental

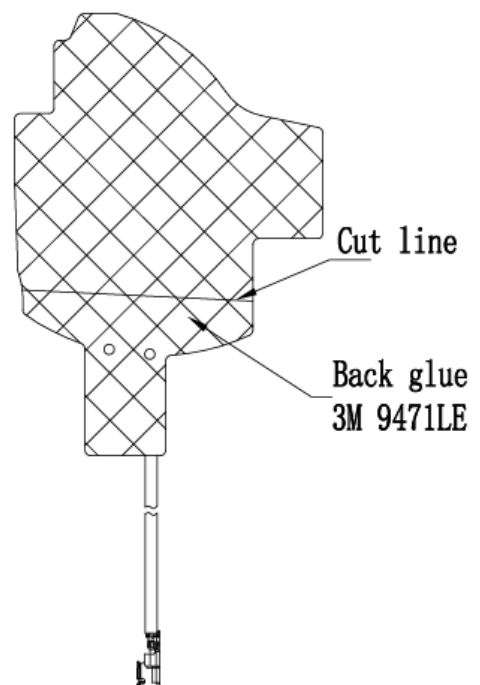
Mechanical	
Antenna Dimensions	42.06 mm× 29.37 mm
Material & Color	FPC & Black
Cable Type & Color & Length	Φ0.81 & Black & 74mm
Connector Type	RF 4
Mounting Type	Adhesive
Weight	Typ. 0.35 g
Environmental	
Operation Temperature	-40 °C to +85 °C
Storage Temperature	-40 °C to +85 °C

RoHS2.0 & REACH Compliant	Yes
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2 Drawing



Top



Bottom

3 Detailed Performance

3.1. Antenna Gain

Frequency (MHz)	Gain (dBi)	Efficiency (dB)	Efficiency (%)
1500	0.15	-4.61	34.62
1505	0.03	-4.68	34.02
1510	-0.01	-4.74	33.54
1515	-0.11	-4.79	33.17
1520	-0.2	-4.81	33.03
1525	-0.25	-4.82	32.99
1530	-0.15	-4.72	33.76
1535	-0.16	-4.71	33.81
1540	-0.12	-4.65	34.28
1545	0	-4.53	35.26
1550	0.1	-4.37	36.56
1555	0.06	-4.31	37.1
1560	0.16	-4.22	37.82
1565	0.31	-4.11	38.78
1570	0.26	-4.11	38.78
1575	0.39	-4.07	39.16
1580	0.35	-4.03	39.55
1585	0.38	-4.03	39.5
1590	0.38	-3.99	39.87
1595	0.5	-3.9	40.75
1600	0.42	-3.94	40.39

2400	1.14	-2.38	57.84
2410	0.85	-2.64	54.47
2420	0.89	-2.62	54.66
2430	1.04	-2.54	55.75
2440	0.74	-2.63	54.56
2450	0.9	-2.56	55.45
2460	1.07	-2.6	54.97
2470	0.87	-2.73	53.34
2480	0.6	-2.82	52.22
2490	0.56	-2.9	51.33
2500	0.78	-2.87	51.66

5150	3.24	-3.98	40
5160	3.59	-4.02	39.63
5170	3.89	-3.94	40.39
5180	3.55	-3.95	40.24
5190	3.46	-3.94	40.34
5200	3.65	-3.98	39.97
5210	3.62	-4.07	39.19
5220	3.62	-4.15	38.44
5230	3.69	-4.13	38.61
5240	3.74	-4.21	37.95
5250	3.65	-4.26	37.53
5260	3.78	-4.27	37.43
5270	3.83	-4.32	36.95
5280	3.93	-4.4	36.32
5290	3.69	-4.43	36.02
5300	3.41	-4.43	36.05
5310	3.42	-4.49	35.57
5320	3.43	-4.58	34.83
5330	3.34	-4.6	34.68
5340	3.34	-4.63	34.47
5350	3.3	-4.59	34.78
5360	3.21	-4.62	34.5
5370	3.08	-4.68	34.01
5380	2.93	-4.74	33.61
5390	2.78	-4.82	32.98
5400	2.63	-4.77	33.33
5410	2.53	-4.85	32.75
5420	2.53	-4.86	32.67
5430	2.54	-4.85	32.72
5440	2.24	-4.83	32.85
5450	2.13	-4.99	31.72
5460	2.33	-4.99	31.69
5470	2.46	-5.02	31.45
5480	2.49	-5.11	30.82
5490	2.64	-5.13	30.71
5500	2.7	-5.15	30.54
5510	2.7	-5.15	30.53
5520	2.75	-5.12	30.78
5530	2.95	-5.03	31.39
5540	2.95	-5	31.59
5550	2.94	-5.02	31.51
5560	2.86	-4.99	31.72
5570	2.95	-4.92	32.23
5580	3.21	-4.84	32.83
5590	3.43	-4.7	33.87
5600	3.38	-4.69	33.97
5610	3.4	-4.62	34.52
5620	3.54	-4.62	34.53
5630	3.63	-4.6	34.64
5640	3.56	-4.54	35.2
5650	3.07	-4.68	34.04
5660	3.1	-4.72	33.7
5670	3.41	-4.57	34.89
5680	3.6	-4.42	36.11
5690	3.56	-4.44	35.95
5700	3.55	-4.49	35.59
5710	3.68	-4.44	35.97
5720	3.66	-4.39	36.36
5730	3.51	-4.51	35.42
5740	3.57	-4.51	35.44
5750	3.66	-4.55	35.04
5760	3.58	-4.43	36.04
5770	3.18	-4.45	35.87
5780	3.25	-4.47	35.7
5790	3.21	-4.49	35.54
5800	3.03	-4.6	34.68
5810	2.82	-4.61	34.58
5820	2.55	-4.74	33.6
5830	2.35	-4.85	32.75
5840	2.09	-4.9	32.33
5850	1.7	-5.04	31.35

3.1.1. Antenna pattern

