

ANTENNA SPECIFICATIONS

Model : KDT-TE-2450TO-03D-RP

Configuration : Wi-Fi Dual Band

(2.4GHz /5GHz) for External Tilt

RP-SMA-J Connector

Version 1.0

KDT

1. APPLICATION SCORPE

THIS PRODUCT CAN BE USED IN RADIO TELECOMMUNICATION SYSTEM WITH 2.4GHz/5GHz, LIKE Wi-Fi SYSTEM.

2. OPERATING CONDITIONS

NO.	ITEMS	SPECIFICATIONS
2-1	OPERATING ENVIRONMENT	TEMPERATURE : -40~80°C HUMIDITY : ~90% RH

3. ELECTRONIC SPECIFICATIONS

NO	ITEMS	SPECIFICATIONS
3-1	IMPEDANCE	50Ω
3-2	FREQUENCY RANGE	2.4~2.5GHz / 5.1~5.9GHz
3-3	PEAK GAIN (ON HORIZONTAL)	1.0dBi / 1.0dBi
3-4	VSWR	≤ 2.5

4. APPEARANCE AND MECHANICAL SPECIFICATIONS

NO.	ITEMS	SPECIFICATIONS
4-1	CONNECTOR	RP-SMA PLUG WITH MALE(J)
4-2	BENDING	ANGLE : 180° / 45° / 90° ± 5%
4-3	COLOR	WHITE/BLACK
4-4	APPEARANCE AND DIMENSION	REFER TO DRAWING

5. TEST METHOD AND DATA FOR ELECTRONIC SPECIFICATIONS

NO.	ITEMS	SPECIFICATIONS	CONDITION REMARK
5-1	IMPEDANCE	50Ω	At 2.4~2.5GHz/5.1~5.9GHz
5-2	VSWR	≤ 2.5	
5-3 TEST METHOD			<ol style="list-style-type: none"> 1. Network Analyzer 2. Signal Interface : Coaxial Cable 3. SMA connector 4. Test Antenna with angle 90°

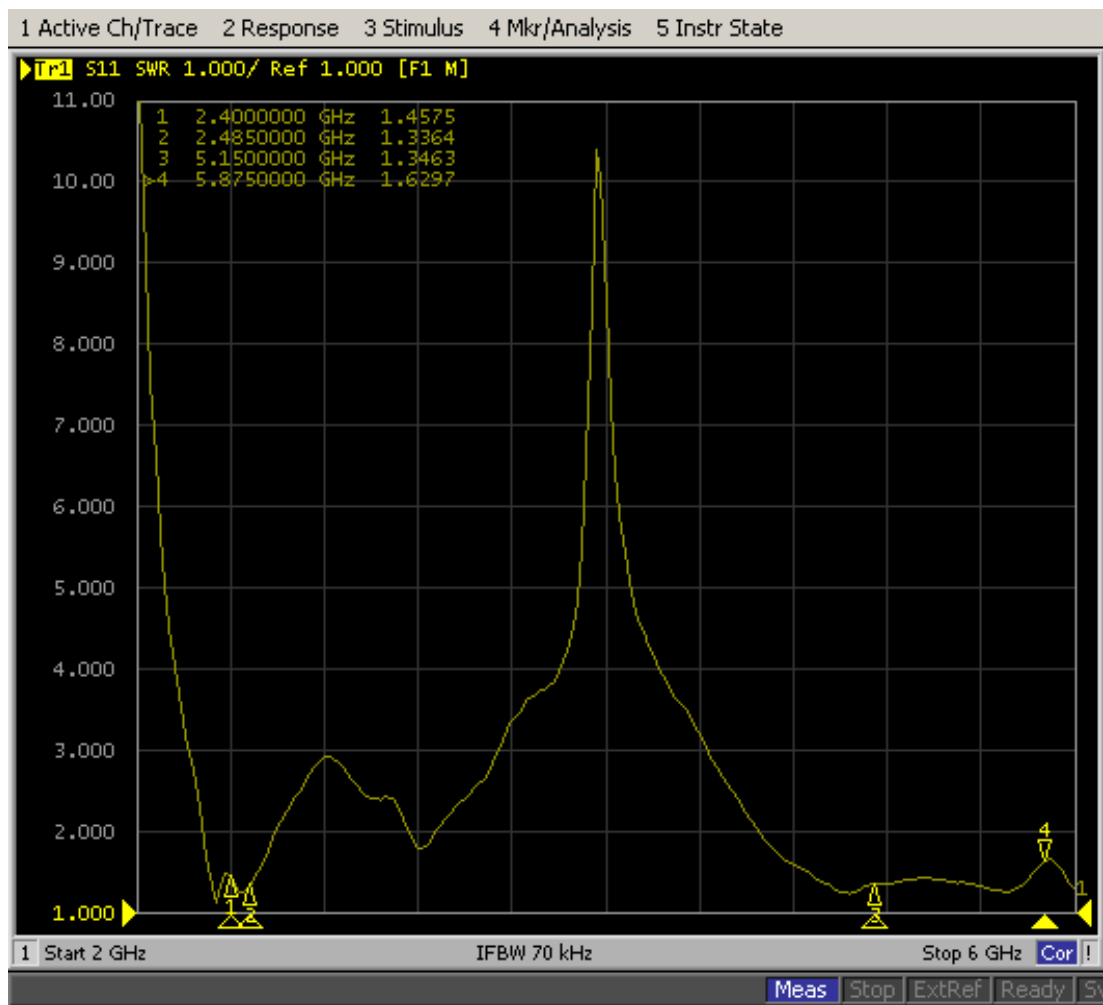


5-4	Peak Gain	1.0dBi	At 2.4~2.5GHz/5.1~5.9GHz
<p>5-5 TEST METHOD ⑤</p> <div style="display: flex; justify-content: space-between;"> <div data-bbox="204 477 699 869" style="border: 2px solid black; padding: 10px;"> <p>The diagram shows a shield room (5) containing a received antenna (4) and a test antenna (2). They are connected by a coaxial cable (3). The received antenna is a double-ridged horn antenna.</p> </div> <div data-bbox="842 389 1358 611"> <ol style="list-style-type: none"> 1. Network Analyzer 2. Test Antenna 3. Signal Interface : Coaxial Cable 4. Received Antenna : Double Ridged Horn Antenna 5. Shield Room </div> </div>			

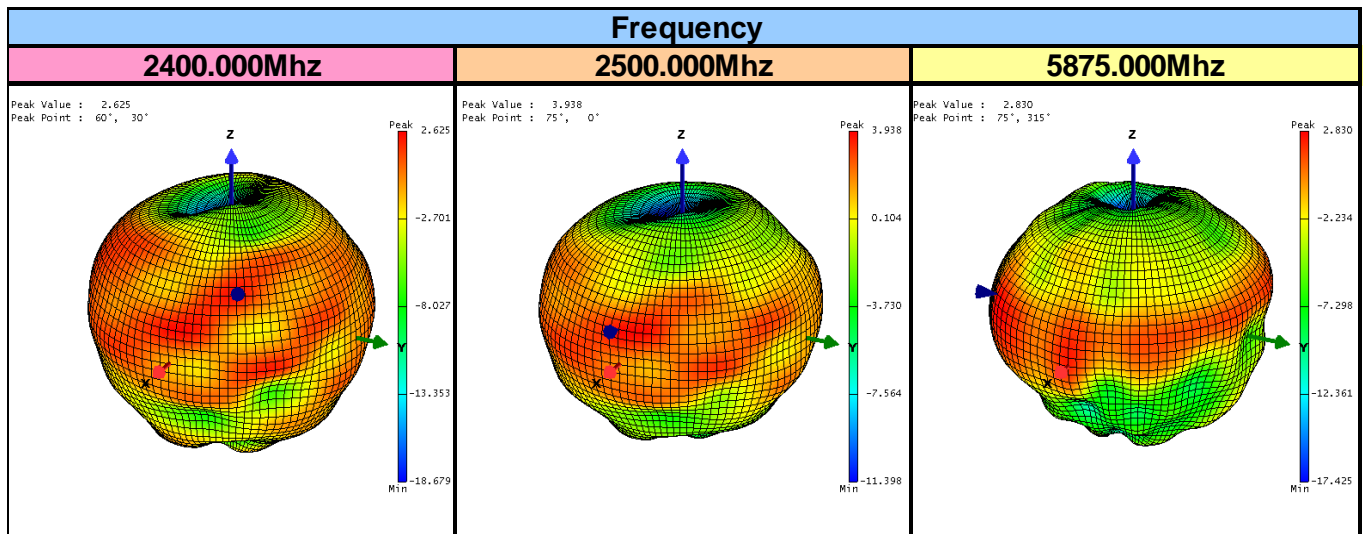
5-6 TEST DATA (Radiation Pattern)

*** SEE NEXT PAGE**

VSWR



Radiation Pattern



Test Results

Frequency	Peak Value		Minimum Value		Avg. Gain	Efficiency
	Value[dBi]	Degree	Value[dBi]	Degree		
2400	2.692	075 / 000	-18.679	015 / 300	-0.835	82.13%
2450	3.698	075 / 000	-13.01	015 / 300	-0.031	98.83%
2500	3.999	075 / 000	-11.736	165 / 000	0.12	102.34%
5150	2.253	090 / 285	-26.794	015 / 285	-1.748	66.55%
5500	3.325	090 / 315	-17.357	015 / 270	-1.665	67.84%
5875	2.83	075 / 315	-17.425	015 / 255	-2.055	62.01%

6. Antenna drawing

