

[在此处键入]

YIXUAN(DongGuan) Electronic Technology Co., Ltd.

Overview

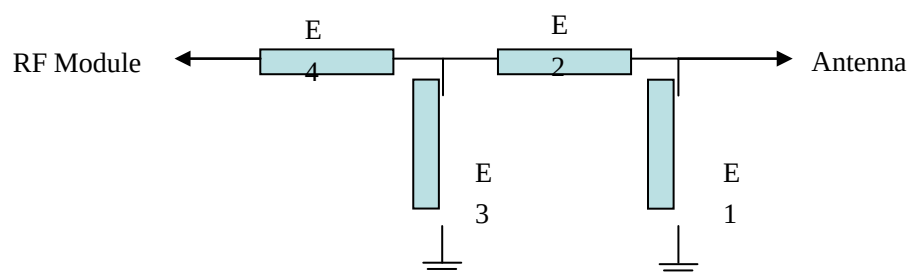
- This approval sheet supports for MID project. PCB antennas include in this project.
This report is for the performance of WLAN+BT antenna.
- Antenna shape size: Meet the requirement of MID
- Antenna band: 2400MHz~2500MHz, 5150MHz~5825MHz
- Antenna material: Antenna material meet the requirement of MID
- Antenna performance meet the spec below:

Description	2400MHz~2500MHz	5150MHz~5825MHz
VSWR	≤ 2.0	≤ 2.0
Antenna Efficiency	≥ 40	≥ 40
Feed Impedance	50 ohms	
Operating Temperature	-40 to +85 deg C	
Polarization / Azimuth	Linear / Omni-directional	

● Mechanical Information

Mechanical Dimension	
Cable Length	60mm/Black
Description	WLAN+BT antenna
Material	FPC
Coaxial Cable	50Ohm/O.D.1.78mm
Environmental	
Operation Temperature	-40 to +85 deg C
Storage Temperature	-40 to +85 deg C

● Circuit diagram



[在此处键入]

YIXUAN(DongGuan) Electronic Technology Co., Ltd.

● Testing Environment

	Test Project	Equipment
S parameter	1:Return Loss	Comprehensive Tester: Agilent E5071B StarPoint SP6011
	2:VSWR	
Active	1:TRP	Darkroom: ETS 7x4x3 m (3D) Chamber ETS 5x3x3 m (3D) Chamber Comprehensive Tester: Agilent 8960 E5515B x2 StarPoint SP6011
	2:TIS	
	3: Frequency Error	
	4: Screen off/on	
Passive	1:Gain	Darkroom: ETS 7x4x3 m (3D) Chamber ETS 5x3x3 m (3D) Chamber Comprehensive Tester: Agilent E5071B StarPoint SP6011
	2:Efficiency	



● WIFI/2.4G/5.8G Active Parameter

Test Result	WIFI2.4G 11Mbps		
	1	6	11
TRP(dBm)	14.17	14.28	14.56
TIS(dBm)			-84.37

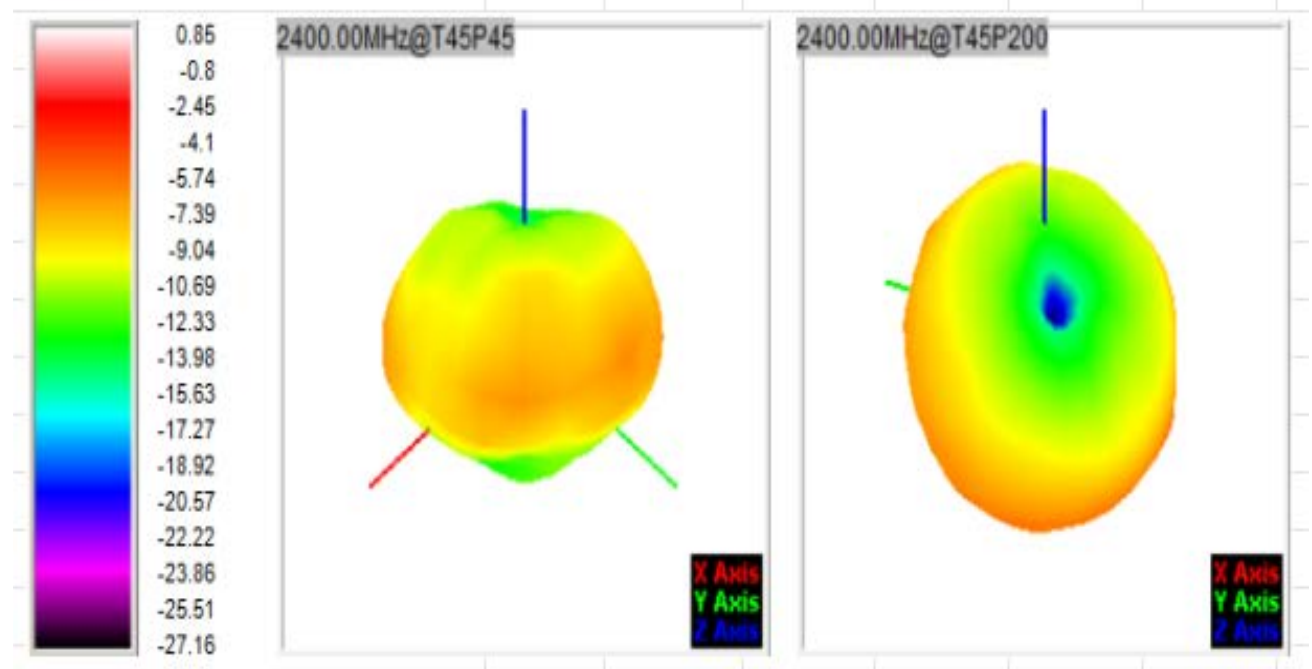
Test Result	WIFI5.8G 54Mbps		
	36	149	165
TRP(dBm)	10.13	10.26	10.57
TIS(dBm)			-70.36

[在此处键入]

YIXUAN(DongGuan) Electronic Technology Co., Ltd.

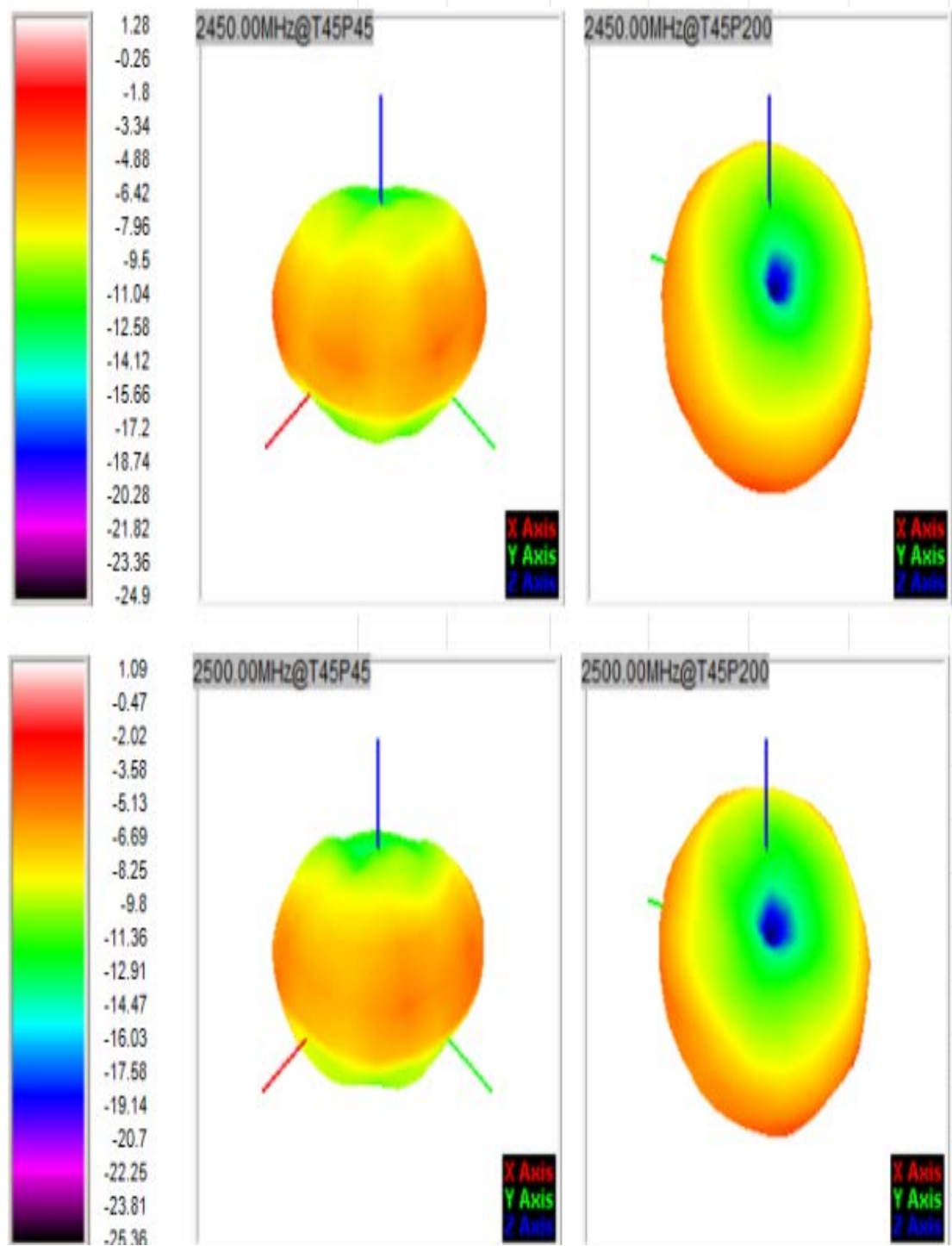
● WiFi+BT Efficiency Gain:

FETUKEII																										
Frequency ID	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26
Frequency (MHz)	2400.0	2410.0	2420.0	2430.0	2440.0	2450.0	2460.0	2470.0	2480.0	2490.0	2500.0	5150.0	5200.0	5250.0	5300.0	5350.0	5400.0	5450.0	5500.0	5550.0	5600.0	5650.0	5700.0	5750.0	5800.0	5850.0
Point Values																										
Ant. Port Input Pwr. (dBm)	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Tot. Rad. Pwr. (dBm)	-3.40	-3.44	-3.45	-3.22	-3.19	-2.91	-3.08	-3.30	-3.28	-3.05	-2.93	-4.11	-4.07	-3.80	-3.30	-3.14	-2.81	-2.84	-3.20	-3.19	-2.60	-3.05	-3.41	-3.18	-3.15	-3.08
Peak EIRP (dBm)	0.85	0.79	0.65	1.04	1.08	1.28	1.01	0.91	1.00	1.13	1.09	0.44	0.76	0.73	0.88	1.07	1.74	1.46	0.97	0.89	1.24	0.91	0.89	1.43	1.60	1.69
Directivity (dBi)	4.24	4.23	4.10	4.26	4.27	4.19	4.08	4.21	4.27	4.18	4.02	4.55	4.83	4.53	4.19	4.20	4.56	4.30	4.17	4.08	3.84	3.95	4.30	4.61	4.74	4.77
Efficiency (dB)	-3.40	-3.44	-3.45	-3.22	-3.19	-2.91	-3.08	-3.30	-3.28	-3.05	-2.93	-4.11	-4.07	-3.80	-3.30	-3.14	-2.81	-2.84	-3.20	-3.19	-2.60	-3.05	-3.41	-3.18	-3.15	-3.08
Efficiency (%)	45.80	45.30	45.20	47.60	48.00	51.10	49.30	46.70	47.00	49.50	50.90	38.80	39.10	41.70	46.70	48.50	52.30	52.00	47.90	48.00	55.00	49.60	45.60	48.10	48.50	49.30
Gain (dBi)	0.85	0.79	0.65	1.04	1.08	1.28	1.01	0.91	1.00	1.13	1.09	0.44	0.76	0.73	0.88	1.07	1.74	1.46	0.97	0.89	1.24	0.91	0.89	1.43	1.60	1.69
NHPRP $\pm$ PI/4 (dBm)	-4.10	-4.13	-4.12	-3.88	-3.83	-3.55	-3.71	-3.93	-3.90	-3.67	-3.55	-4.75	-4.78	-4.52	-4.00	-3.90	-3.58	-3.52	-3.95	-3.97	-3.33	-3.87	-4.32	-4.08	-4.05	-3.96
NHPRP $\pm$ PI/6 (dBm)	-5.18	-5.22	-5.20	-4.96	-4.92	-4.64	-4.80	-5.03	-4.99	-4.75	-4.63	-5.85	-5.94	-5.68	-5.13	-5.13	-4.82	-4.61	-5.12	-5.16	-4.44	-5.04	-5.47	-5.18	-5.20	-5.11
NHPRP $\pm$ PI/8 (dBm)	-6.10	-6.14	-6.13	-5.89	-5.86	-5.59	-5.75	-5.97	-5.92	-5.67	-5.55	-6.79	-6.92	-6.67	-6.08	-6.16	-5.88	-5.53	-6.09	-6.17	-5.38	-6.02	-6.39	-6.06	-6.11	-6.04
Upper Hem. PRP (dBm)	-6.03	-6.08	-6.09	-5.88	-5.86	-5.61	-5.82	-6.11	-6.12	-5.90	-5.75	-6.63	-6.35	-5.98	-5.39	-5.06	-4.84	-4.93	-5.12	-5.09	-4.50	-4.82	-5.23	-5.15	-5.24	-5.31
Lower Hem. PRP (dBm)	-6.81	-6.85	-6.86	-6.61	-6.57	-6.27	-6.37	-6.53	-6.47	-6.24	-6.14	-7.67	-7.97	-7.83	-7.49	-7.61	-7.10	-7.02	-7.67	-7.70	-7.11	-7.80	-8.07	-7.55	-7.32	-7.03
Upper Hem. PRP (%)	24.93	24.64	24.58	25.82	25.94	27.51	26.19	24.48	24.46	25.73	26.63	21.72	23.16	25.22	28.92	31.21	32.81	32.16	30.78	30.97	35.51	32.99	29.97	30.52	29.95	29.43
Lower Hem. PRP (%)	20.83	20.63	20.63	21.82	22.05	23.63	23.07	22.25	22.57	23.78	24.32	17.11	15.97	16.47	17.82	17.32	19.49	19.86	17.08	16.98	19.46	16.59	15.60	17.59	18.52	19.83



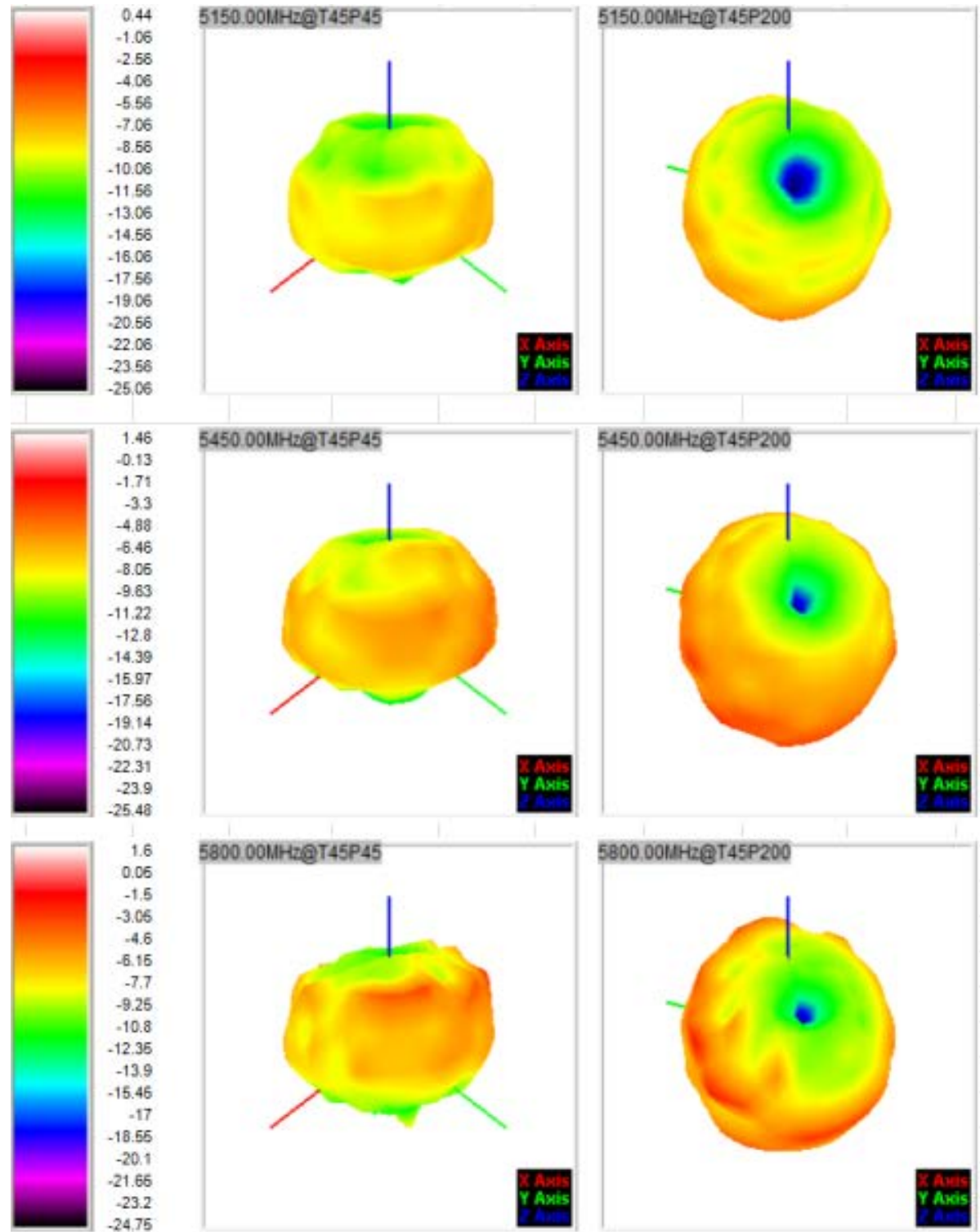
[在此处键入]

YIXUAN(DongGuan) Electronic Technology Co., Ltd.



[在此处键入]

YIXUAN(DongGuan) Electronic Technology Co., Ltd.



[在此处键入]

YIXUAN(DongGuan) Electronic Technology Co., Ltd.

● Dimension drawing:

