

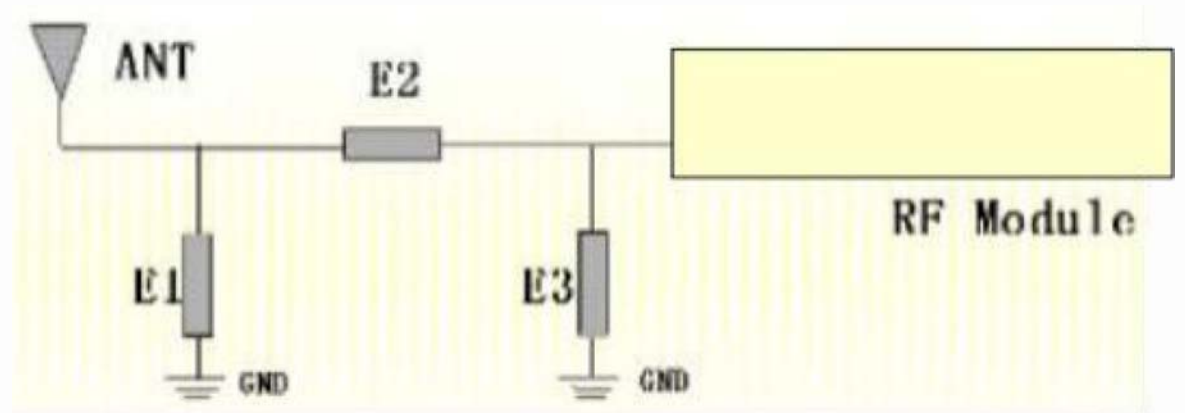
Antenna test report

Project name	
Customer	BYM
test frequency	BT (2.4G)
Antenna material	PVB
Product name	BAND
Material Science	Metal
Testers	liu ingyun
Consulting phone	
date	2022. 6. 21

Antenna appearance



Antenna circuit matching description



matching	parameter	
E1(0402)	10nH	
E2(0402)	1pF	
E3(0402)	3.9nH	

Passive antenna test



SWR



Return loss

frequency	SWR
2400	1.74

frequency	Return loss
2400	-11.33db

Passive antenna efficiency test (antenna 2.4G-3D- benefit)

FEITUKEJI											
Frequency ID	1	2	3	4	5	6	7	8	9	10	11
Frequency (MHz)	2400.0	2410.0	2420.0	2430.0	2440.0	2450.0	2460.0	2470.0	2480.0	2490.0	2500.0
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
Tot. Rad. Pwr. (dBm)	-5.10	-5.11	-5.30	-5.48	-5.58	-5.57	-5.56	-5.46	-5.49	-5.41	-5.10
Peak EIRP (dBm)	-0.88	-0.84	-1.02	-1.11	-1.23	-1.17	-1.08	-0.94	-0.86	-0.81	-0.48
Directivity (dBi)	4.22	4.27	4.29	4.37	4.35	4.40	4.47	4.52	4.64	4.60	4.62
Efficiency (dB)	-5.10	-5.11	-5.30	-5.48	-5.58	-5.57	-5.56	-5.46	-5.49	-5.41	-5.10
Efficiency (%)	30.90	30.90	29.50	28.30	27.70	27.70	27.80	28.50	28.20	28.80	30.90
Gain (dBi)	-0.88	-0.84	-1.02	-1.11	-1.23	-1.17	-1.08	-0.94	-0.86	-0.81	-0.48
NHPRP \pm Pi/4 (dBm)	-6.23	-6.23	-6.48	-6.63	-6.72	-6.65	-6.49	-6.27	-6.26	-6.17	-5.91
NHPRP \pm Pi/6 (dBm)	-7.63	-7.63	-7.88	-8.03	-8.13	-8.06	-7.91	-7.68	-7.68	-7.60	-7.34
NHPRP \pm Pi/8 (dBm)	-9.72	-9.73	-9.95	-10.13	-10.22	-10.16	-10.02	-9.80	-9.81	-9.74	-9.49
Upper Hem. PRP (dBm)	-8.90	-8.92	-9.12	-9.30	-9.40	-9.41	-9.41	-9.35	-9.41	-9.34	-9.05
Lower Hem. PRP (dBm)	-7.44	-7.44	-7.63	-7.81	-7.91	-7.88	-7.86	-7.74	-7.75	-7.66	-7.35
Upper Hem. PRP (%)	12.88	12.83	12.24	11.75	11.48	11.45	11.44	11.62	11.46	11.64	12.45
Lower Hem. PRP (%)	18.02	18.03	17.25	16.54	16.20	16.29	16.39	16.84	16.78	17.12	18.42

Contrast data diagram of antenna measured (10 meters distance)

