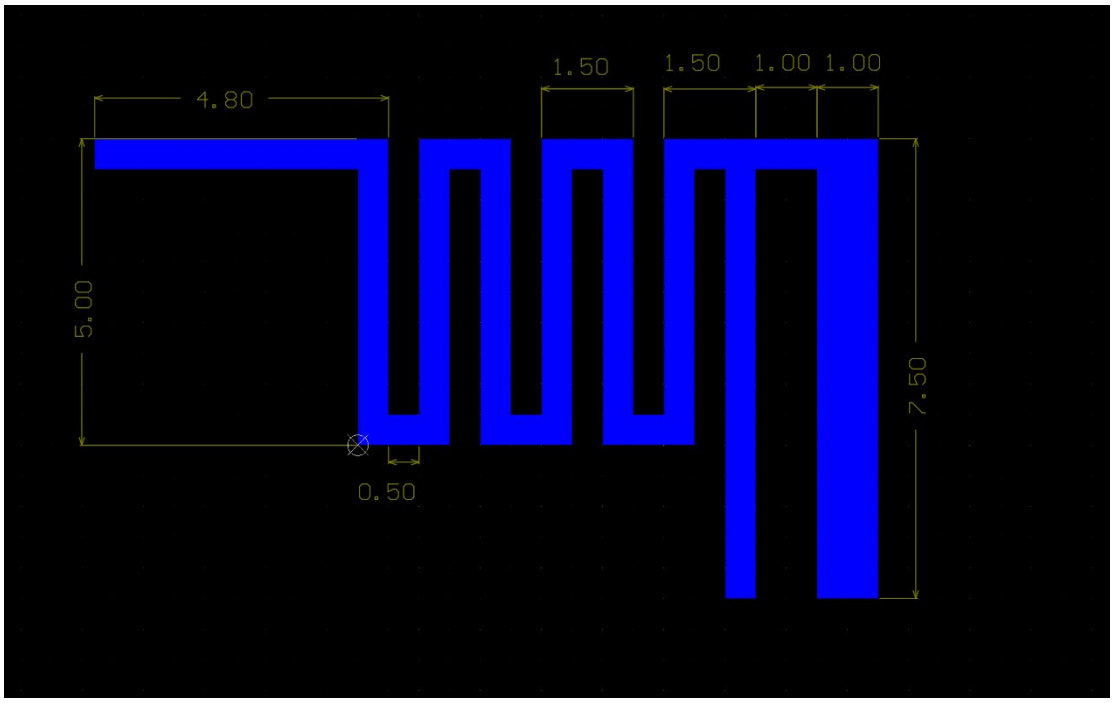
This antenna structure is the PCB antenna in the complete layout

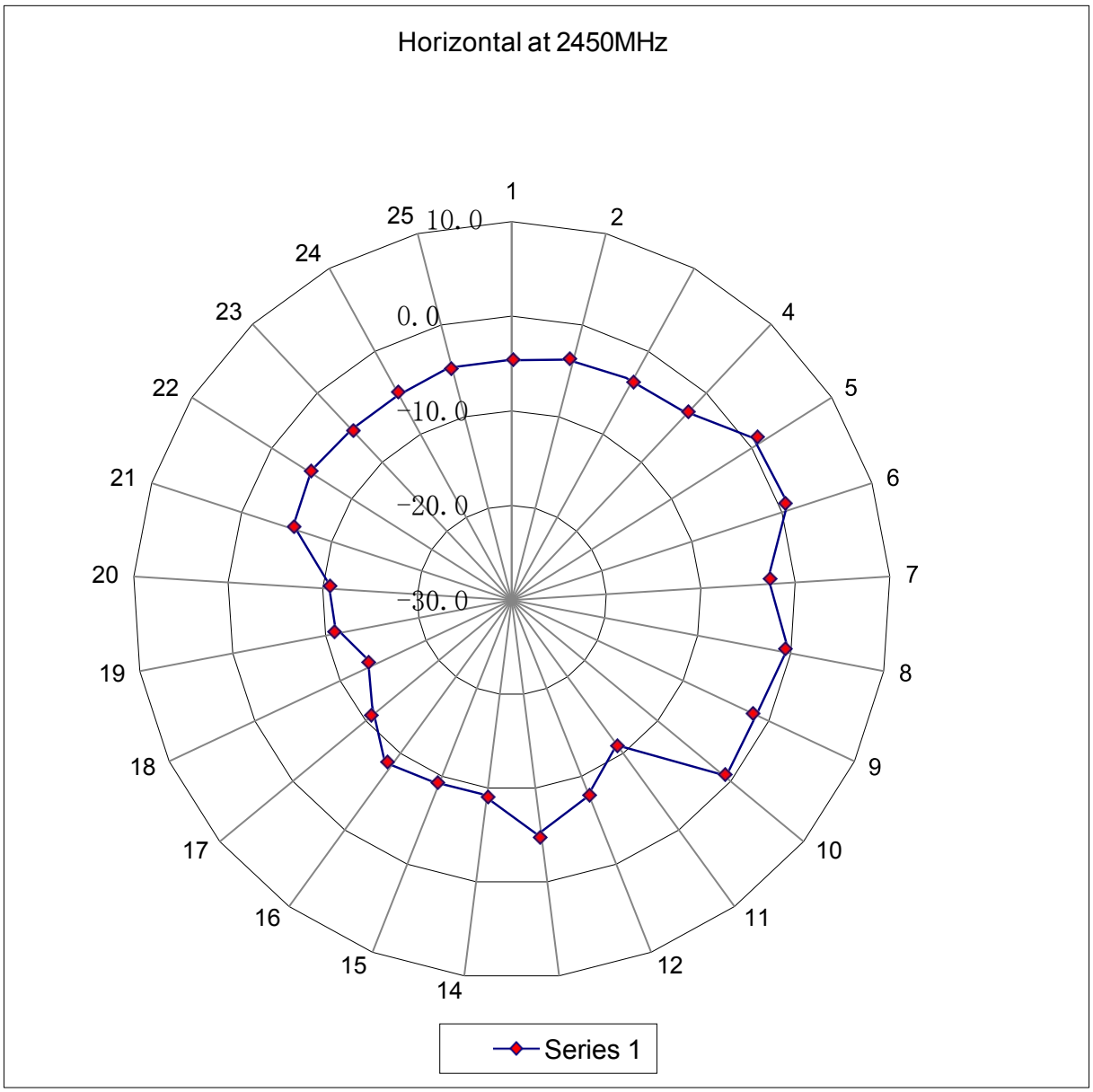
The specific dimensions of the antenna are as follows (the plate is two layers of FR4, the plate thickness is 0.8)



Antenna Gain Test Report:

MRT Technology (Suzhou) Co., Ltd
Phone: +86-512-66308358
Fax: +86-512-66308368
www.mrt-cert.com
曼瑞检测科技(苏州)有限公司

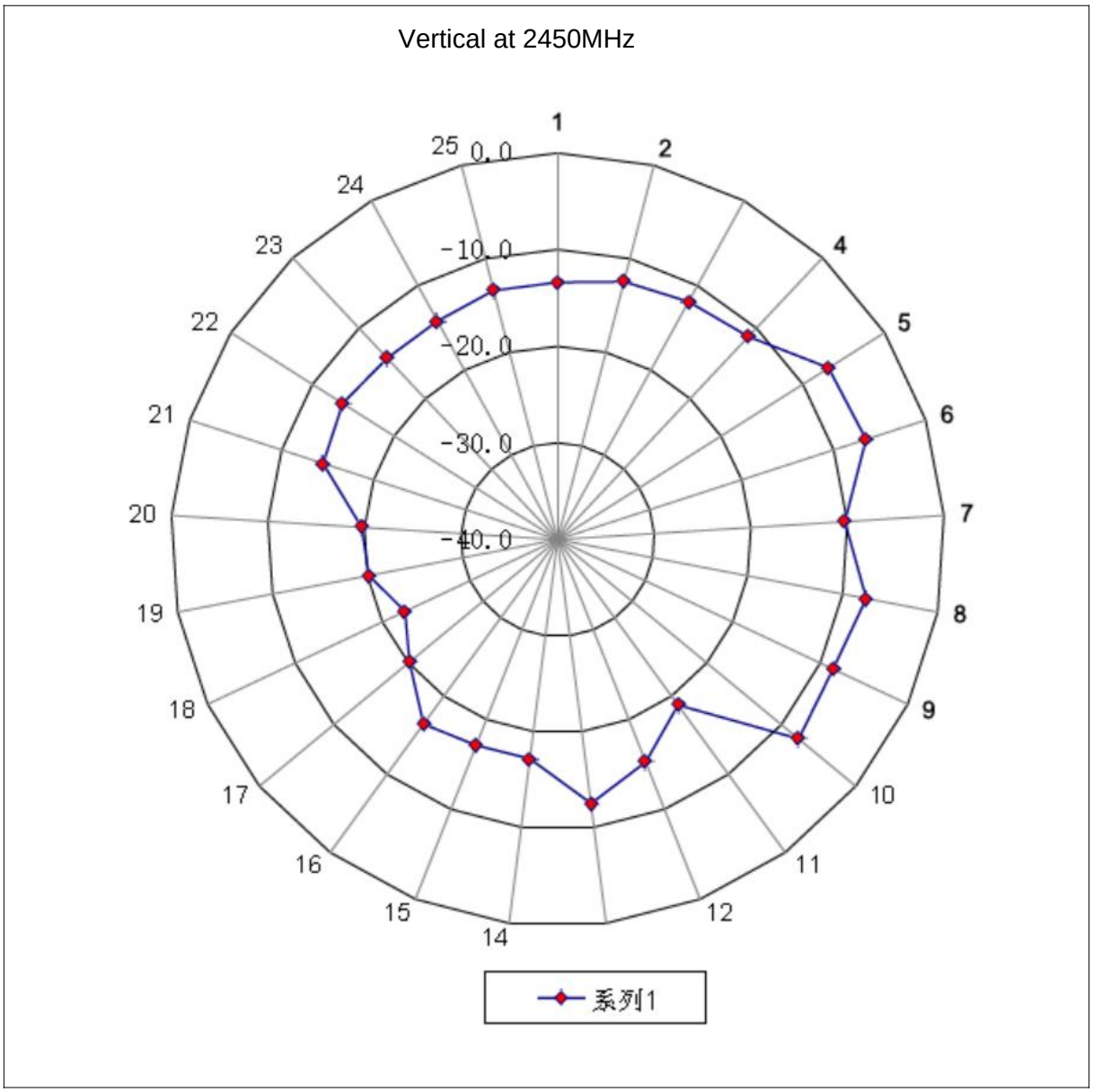
Test Mode:	Mode 1	Polarization:	Horizontal	MAX Gain:	1
Angle of Turn Table (°)	SG Output Level (dBm)	2450MHz Reading Level (dBm)	2450MHz Substitution Level (dBm)	2450MHz Cable Loss (dB)	2450MHz Antenna Gain (dBi)
0	-20	-47.20	8.00	1.00	-5.2
15	-20	-45.30	8.00	1.00	-6.15
30	-20	-45.10	8.00	1.00	-6.72
45	-20	-39.96	8.00	1.00	-7.54
60	-20	-47.58	8.00	1.00	-8.67
75	-20	-35.25	8.00	1.00	0.92
90	-20	-32.90	8.00	1.00	1.00
105	-20	-40.37	8.00	1.00	-0.71
120	-20	-35.11	8.00	1.00	-0.92
135	-20	-43.48	8.00	1.00	-0.89
150	-20	-36.87	8.00	1.00	-0.78
165	-20	-40.01	8.00	1.00	-11.2
180	-20	-40.49	8.00	1.00	-9.23
195	-20	-41.97	8.00	1.00	-5.42
210	-20	-43.84	8.00	1.00	-9.78
225	-20	-52.96	8.00	1.00	-9.74
240	-20	-52.05	8.00	1.00	-9.67
255	-20	-51.85	8.00	1.00	-10.87
270	-20	-46.59	8.00	1.00	-12.78
285	-20	-52.44	8.00	1.00	-10.91
300	-20	-50.87	8.00	1.00	-10.98
315	-20	-47.28	8.00	1.00	-4.36
330	-20	-48.06	8.00	1.00	-5.12
345	-20	-47.17	8.00	1.00	-6.12
360	-20	-47.20	8.00	1.00	-6.08



Remote Control PIFA Antenna Test Report

MRT Technology (Suzhou) Co., Ltd
Phone: +86-512-66308358
Fax: +86-512-66308368
www.mrt-cert.com
曼瑞检测科技(苏州)有限公司

Test Mode:	Mode 1	Polarization:	Vertical	MAX Gain:	-6.50
Angle of Turn Table (°)	SG Output Level (dBm)	2450MHz Reading Level (dBm)	2450MHz Substitution Level (dBm)	2450MHz Cable Loss (dB)	2450MHz Antenna Gain (dBi)
0	-20	-42.95	8.56	1.00	-13.39
15	-20	-42.00	8.56	1.00	-12.44
30	-20	-41.49	8.56	1.00	-11.93
45	-20	-40.75	8.56	1.00	-11.19
60	-20	-36.41	8.56	1.00	-6.85
75	-20	-36.06	8.56	1.00	-6.50
90	-20	-39.80	8.56	1.00	-10.24
105	-20	-37.08	8.56	1.00	-7.52
120	-20	-38.10	8.56	1.00	-8.54
135	-20	-37.22	8.56	1.00	-7.66
150	-20	-48.39	8.56	1.00	-18.83
165	-20	-44.81	8.56	1.00	-15.25
180	-20	-42.05	8.56	1.00	-12.49
195	-20	-46.70	8.56	1.00	-17.14
210	-20	-46.69	8.56	1.00	-17.13
225	-20	-45.96	8.56	1.00	-16.40
240	-20	-49.70	8.56	1.00	-20.14
255	-20	-52.14	8.56	1.00	-22.58
270	-20	-49.71	8.56	1.00	-20.15
285	-20	-49.25	8.56	1.00	-19.69
300	-20	-44.05	8.56	1.00	-14.49
315	-20	-43.25	8.56	1.00	-13.69
330	-20	-43.82	8.56	1.00	-14.26
345	-20	-43.76	8.56	1.00	-14.20
360	-20	-42.95	8.56	1.00	-13.39



Remote Control PIFA Antenna Test Report