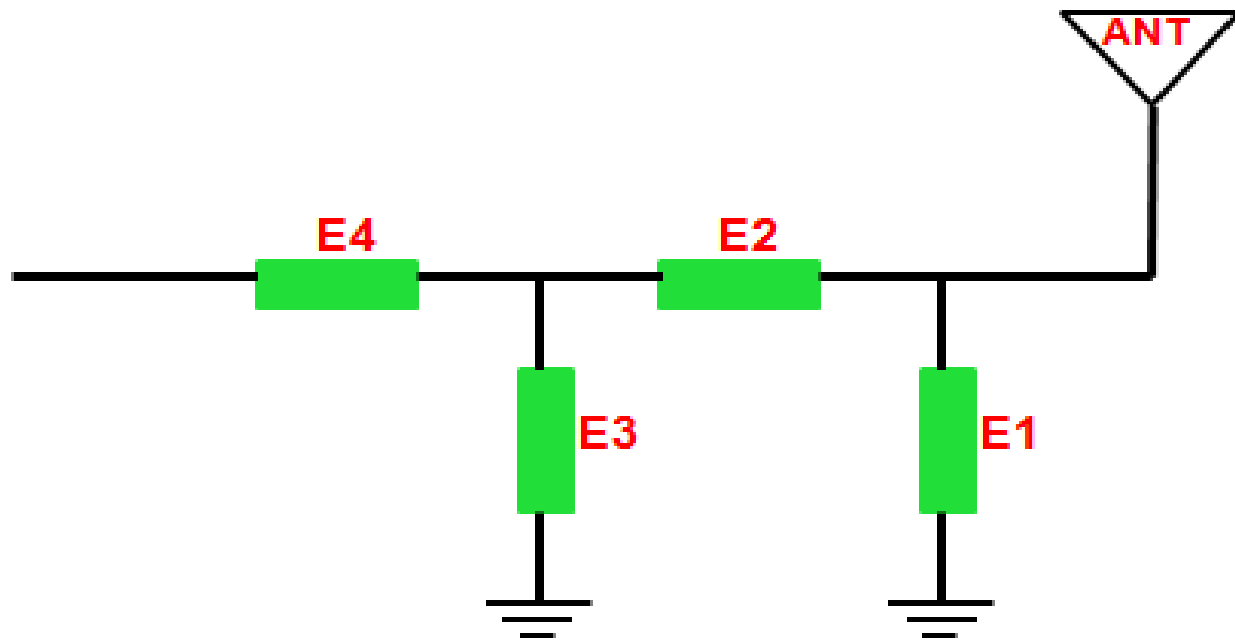


Dongguan Sinbolin Electronic Technology Co.,LTD

Room 205, building 6, 162 Zhenan East Road,Chang'an Town, Dongguan City



Main Antenna		GPS Antenna	
Element	Value	Element	Value
E1 (0402)		E1 (0402)	
E2 (0402)		E2 (0402)	
E3 (0402)		E3 (0402)	
E4 (0402)			
WIFI Antenna		AUX Antenna	
Element	Value	Element	Value
E1 (0402)		E1 (0402)	
E2 (0402)		E2 (0402)	
E3 (0402)		E3 (0402)	

WIFI	CH	CCK TRP(11M)	CCK TIS(11M)
802.11b	1	18.5	-85
	6	18.0	-86
	13	18.0	-88

WIFI	CH	OFDM TRP(54M)	OFDM TIS(54M)
802.11g	1	17.0	-76
	6	17.5	-75
	13	17.5	-76

WIFI	CH	TRP(MSC7)	TIS(MSC7)
802.11n	1	14.5	-72
	6	14.5	-71
	13	14.0	-72

WIFI	CH	TRP(MCS9)	TIS(MCS9)
802.11ac	36	13	-65
	149	13.5	-66
	165	13	-66
WIFI	CH	TRP(MCS11)	TIS(MCS9)
802.11ax	36	13	-64
	149	13	-65
	165	12.5	-65

WIFI	CH	CCK TRP(11M)	CCK TIS(11M)
802.11b	1	17.2	-81.3
	6	16.8	-82.5
	13	16.6	-83.7

WIFI	CH	OFDM TRP(54M)	OFDM TIS(54M)
802.11g	1	15.2	-72.3
	6	15.0	-72.9
	13	15.6	-73.3

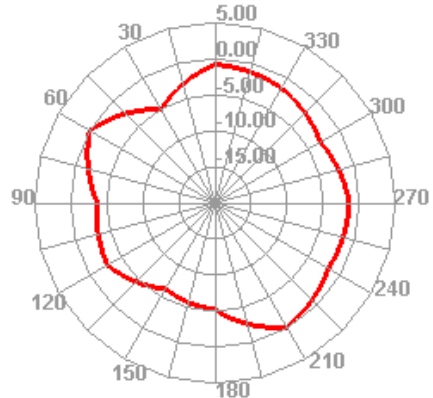
WIFI	CH	TRP(MSC7)	TIS(MSC7)
802.11n	1	13.6	-68.2
	6	13.3	-68.7
	13	12.8	-69.1

WIFI	CH	TRP(MCS9)	TIS(MCS9)
802.11ac	36	12.3	-63.4
	149	12.1	-63.5
	165	11.6	-63.3
WIFI	CH	TRP(MCS11)	TIS(MCS9)
802.11ax	36	11.2	-62.2
	149	11.5	-62.6
	165	11.7	-62.5

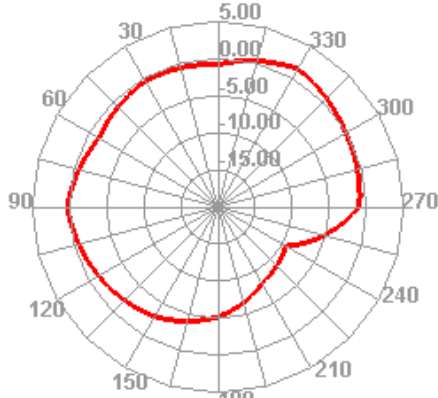
Radiation Patterns (2400-2500MHz)

Passive Test For WIFI2400										
Freq (MHz)	Effi (%)	Effi (dB)	Gain (dBi)	Gain (dBd)	UHS (%)	DHS (%)	Max (dBi)	Min (dB)	irectivity (dBi)	Beamwidth (3dB)
2400	63.25	-1.99	2.02	-0.13	34.414	28.832	2.02	-9.78	4.01	0
2410	63.13	-2	2.01	-0.14	34.114	29.011	2.01	-9.48	4.01	0
2420	64.89	-1.88	2.07	-0.08	34.843	30.044	2.07	-9.29	3.94	60
2430	64.76	-1.89	2.05	-0.1	34.546	30.216	2.05	-9.74	3.94	60
2440	65.54	-1.84	1.96	-0.19	34.68	30.857	1.96	-10.11	3.79	60
2450	64.02	-1.94	1.7	-0.45	33.588	30.435	1.7	-10.77	3.64	60
2460	62.2	-2.06	1.43	-0.72	32.402	29.798	1.43	-11.01	3.49	60
2470	62.89	-2.01	1.32	-0.83	32.613	30.275	1.32	-10.82	3.33	60
2480	65.36	-1.85	1.37	-0.78	33.921	31.439	1.37	-10.74	3.21	60
2490	70.56	-1.51	1.63	-0.52	36.74	33.82	1.63	-10.87	3.15	60
2500	71.58	-1.45	1.67	-0.48	37.51	34.07	1.67	-11.54	3.12	60

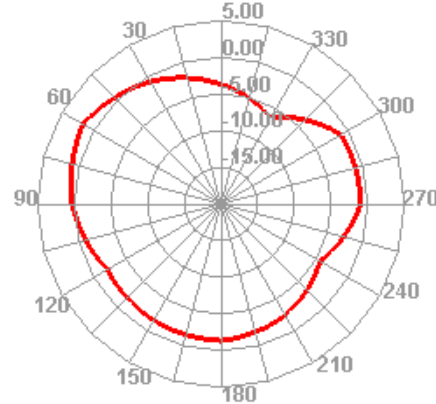
2410.000MHz E1



2410.000MHz E2



2410.000MHz H

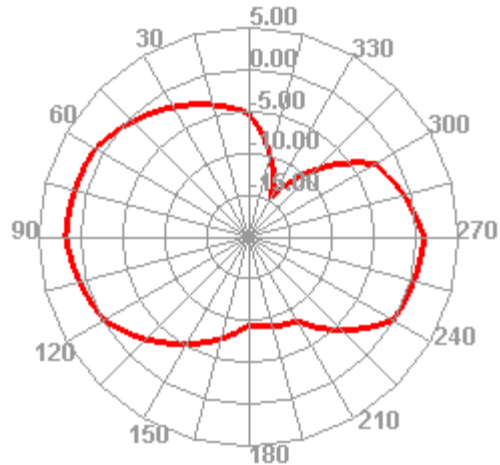


unit:dBi

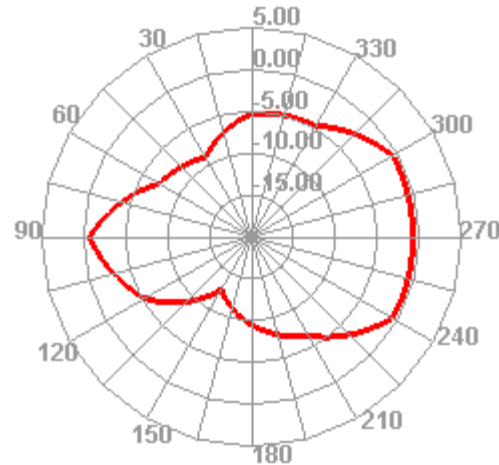
Radiation Patterns (5150-5850MHz)

Passive Test For WIFI-5G										
Freq (MHz)	Effi (%)	Effi (dB)	Gain (dBi)	Gain (dBd)	UHS (%)	DHIS (%)	Max (dB)	Min (dB)	irectivity (dBi)	Beamwidth (3dB)
5150	67.05	-1.74	2.83	0.68	31.013	36.037	2.83	-14.42	4.56	0
5250	66.57	-1.77	2.84	0.69	30.36	36.214	2.84	-15.21	4.61	0
5350	67.1	-1.73	2.96	0.81	30.053	37.051	2.96	-16.12	4.7	0
5450	65.57	-1.83	3.05	0.9	28.694	36.881	3.05	-17.45	4.88	0
5550	62.57	-2.04	2.99	0.84	26.709	35.857	2.99	-18.9	5.03	0
5650	61.51	-2.11	3	0.85	25.652	35.857	3	-19.52	5.11	0
5750	62.38	-2.05	3.02	0.87	25.466	36.909	3.02	-19.26	5.07	0
5850	63.17	-1.99	2.9	0.75	25.336	37.834	2.9	-18.46	4.89	0

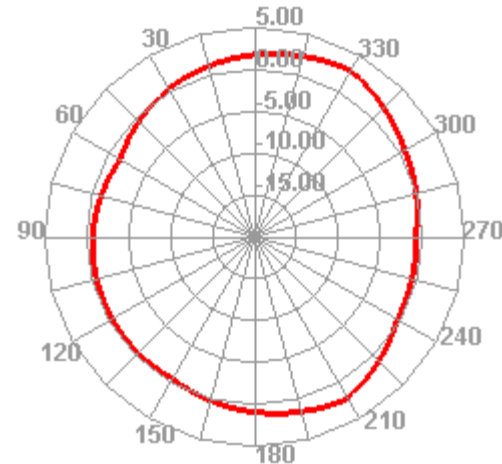
5250.000MHz E1



5250.000MHz E2

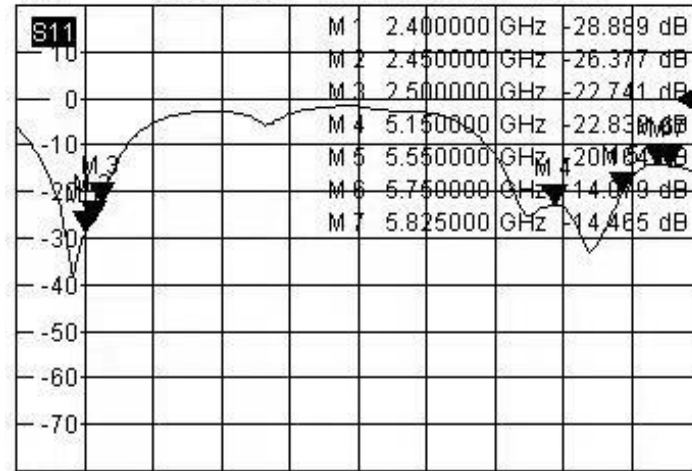


5250.000MHz H



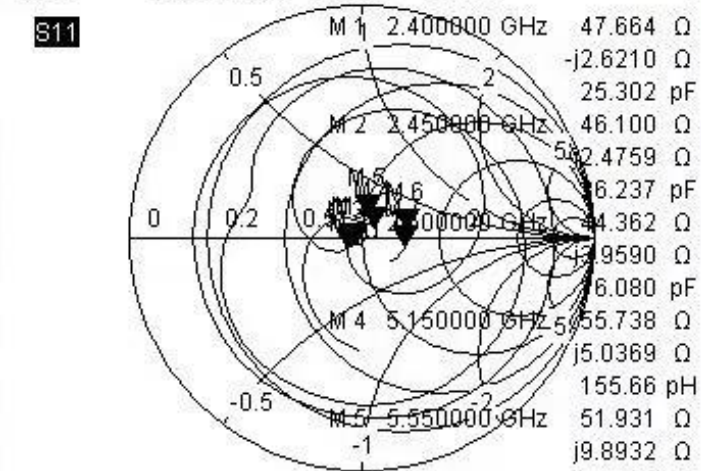
unit:dBi

Trc1 — S11 dB Mag 10 dB / Ref 0 dB Cal Off 1



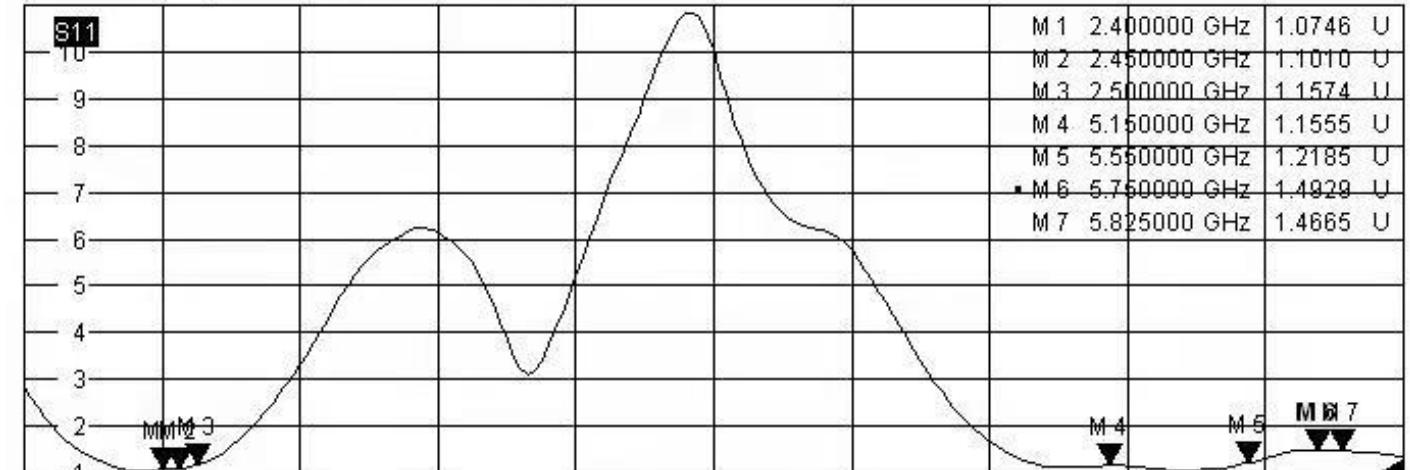
Ch1 Start 2 GHz Pwr 0 dBm Stop 6 GHz

Trc2 — S11 Smith Ref1 U Cal Off 2



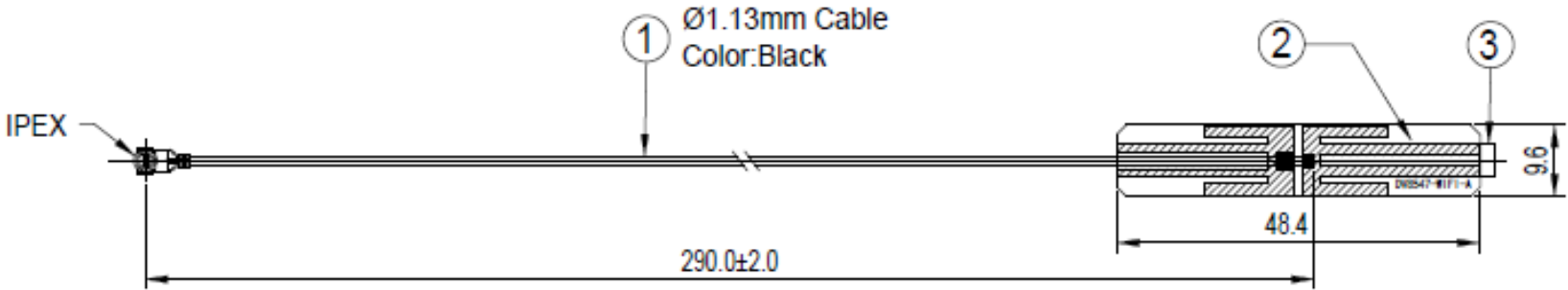
Ch1 Start 2 GHz Pwr 0 dBm Stop 6 GHz

Trc3 — S11 SWR 1 U / Ref1 U Cal Off 3



Ch1 Start 2 GHz Pwr 0 dBm Stop 6 GHz

ANT size



Unit: mm