



Antenna Test Report



Senao Networks, Inc.

Project	Meraki MR76
Product Description	1. BT Antenna *1 2. Scanning*1

Report Date	2023/02/23	Prepare by	Kenny
Report Version	A03	Checked by	Tony
Request Form No.	-		

Antenna specification

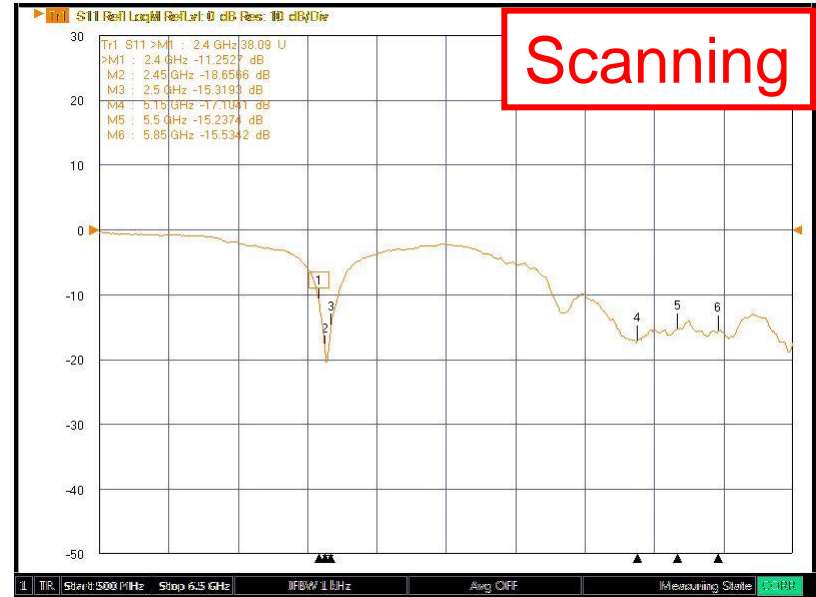
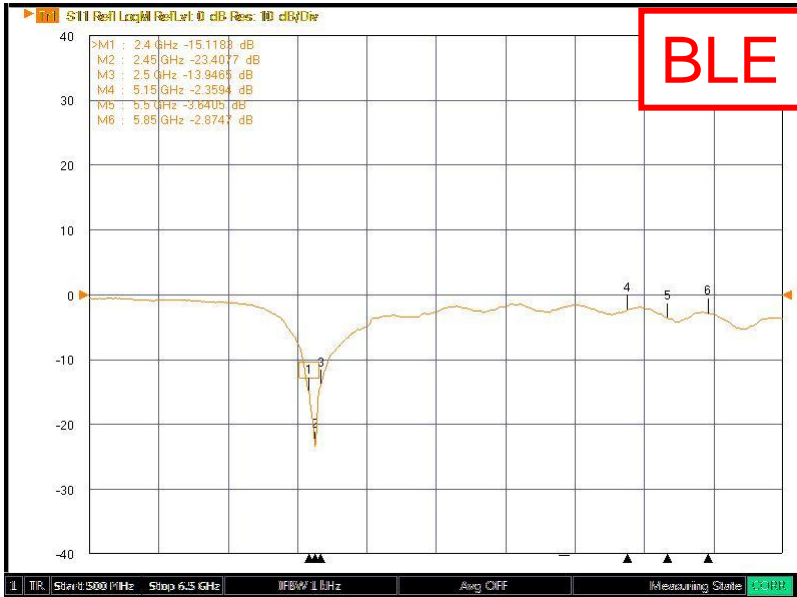
- BLE antenna x1
- Scanning antenna x1
(dual band)

Antennas are stamping metal screwed on bottom cover.

Antenna No.	BLE	Scanning
Frequency (MHz)	2400 - 2500	2400-2500 / 5150 – 5850
Efficiency (%)	78	75@2.4G 81@5G
Gain (dBi)	4.7	4.6@2.4G 5.9@5G
VSWR	2 : 1	
Connector	IPEX	
Cable	1.37mm	

Ant No.	Brand Name	Antenna P/N	Model Name	Address
BLE	Senao	5718A0433300	MR76	No. 500, Fusing 3 rd Rd., Hwa-Ya Technology Park Kuei-Shan Dist., Taoyuan City 33383, Taiwan
Scanning	Senao	5718A0432300	MR76	

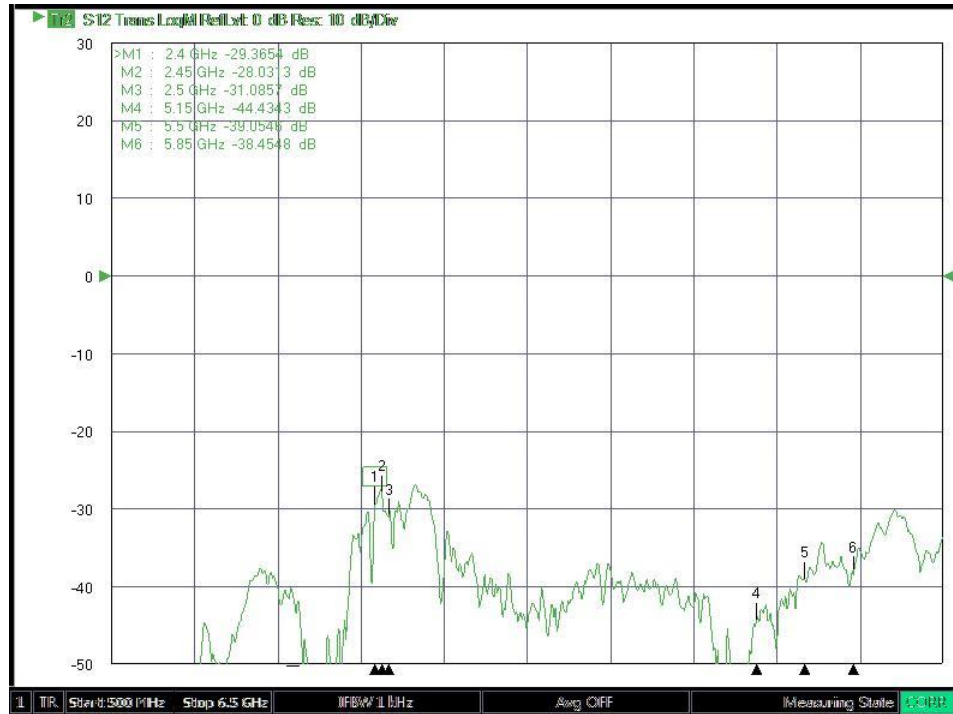
- Return loss is better than -10dB



Frequency (MHz)	2400	2450	2500	5150	5500	5850
BLE S11 (dB)	-15.11	-23.40	-13.94	-	-	-
Scanning S11 (dB)	-11.25	-18.65	-15.31	-17.10	-15.23	-15.53

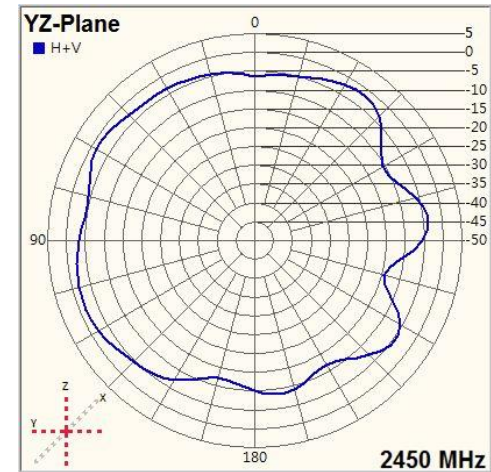
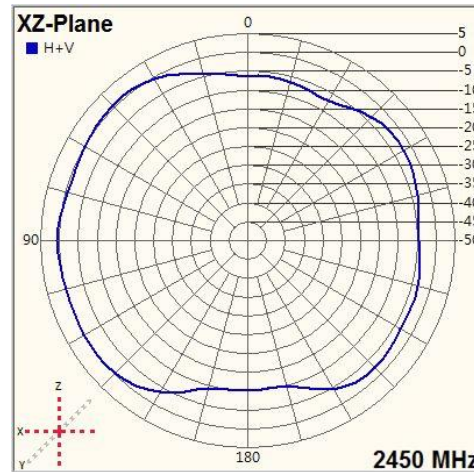
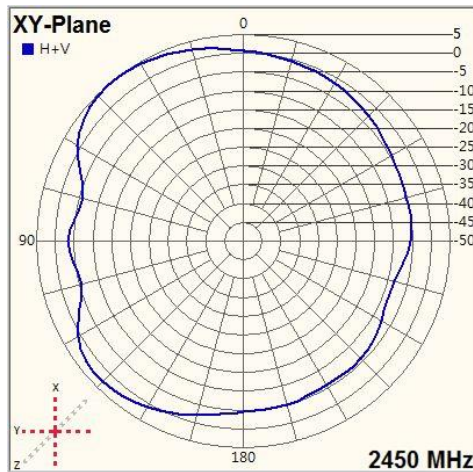
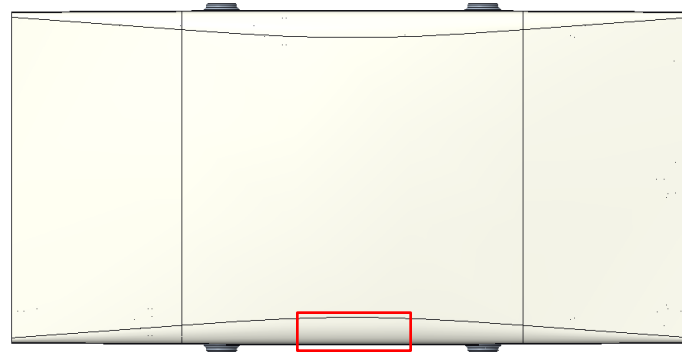
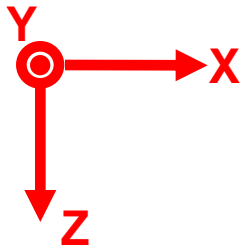
Isolation Comparison

- Isolation is better than -20dB

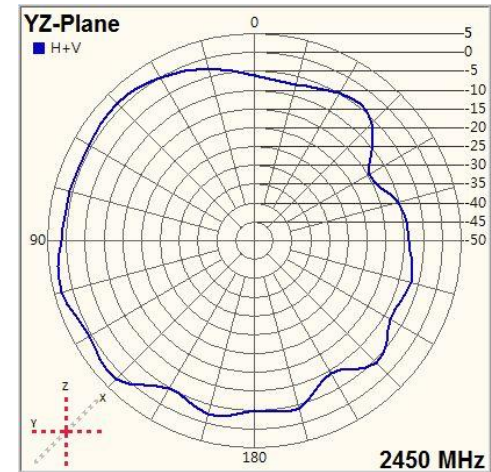
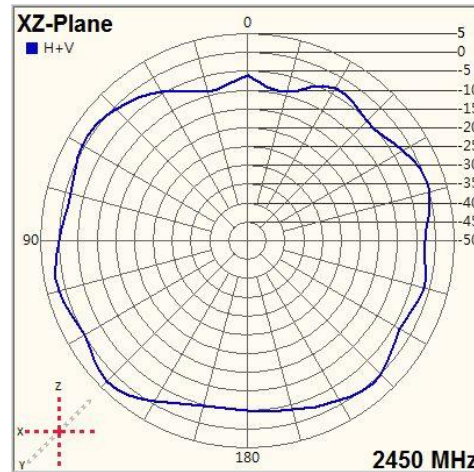
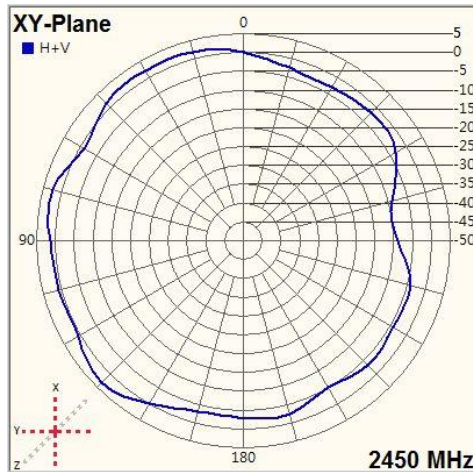
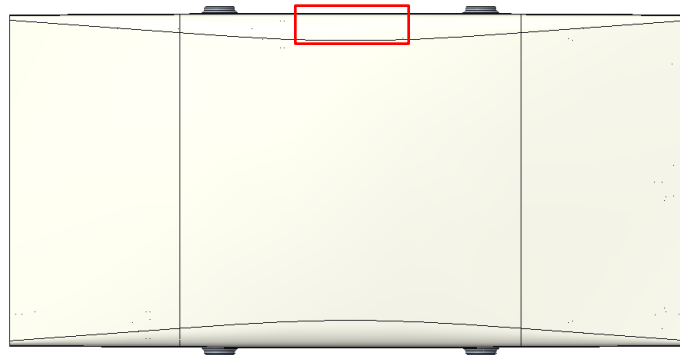
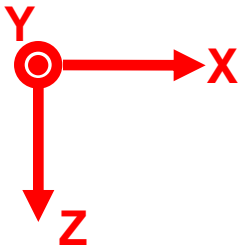


Frequency (MHz)	2400	2450	2500	5150	5500	5850
S21 (dB)	-29.36	-28.03	-31.08	-44.43	-39.05	-38.45

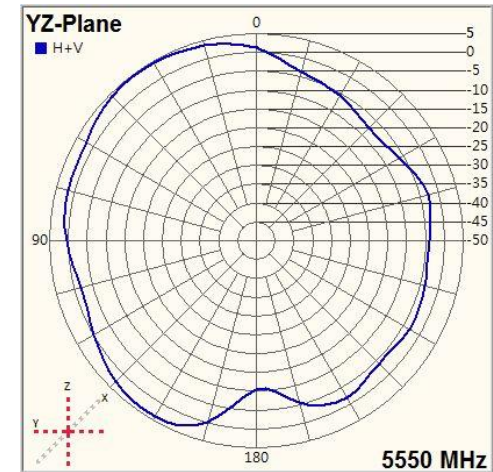
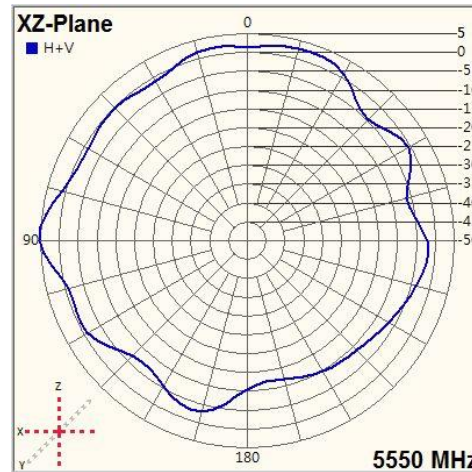
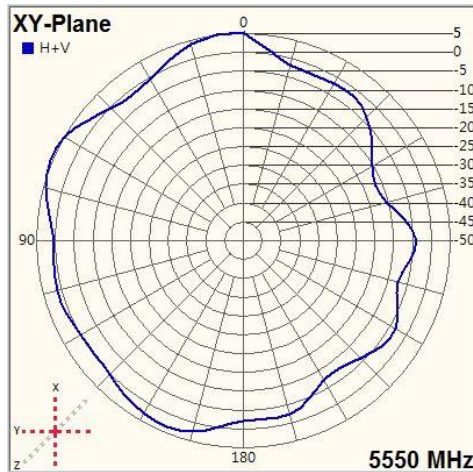
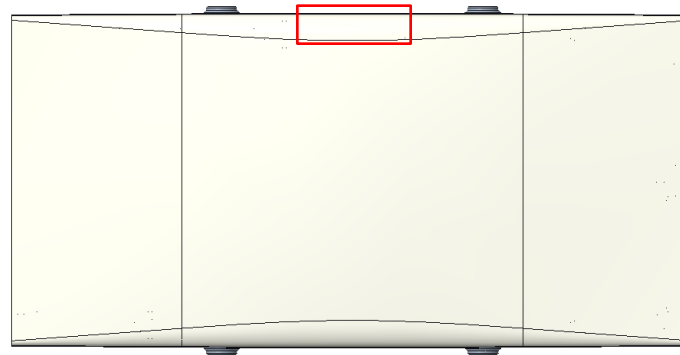
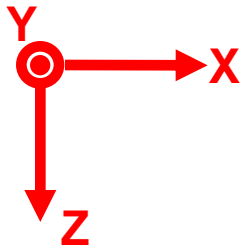
BLE Ant. 2D Gain Pattern @ 2.45GHz



Frequency (MHz)	2400	2450	2500
Efficiency (dB)	-1.18	-1.12	-1.07
Efficiency (%)	76.2	77.2	78.2
Gain (dBi)	4.48	4.70	4.48



Frequency (MHz)	2400	2450	2500
Efficiency (dB)	-1.33	-1.22	-1.33
Efficiency (%)	73.6	75.5	73.7
Gain (dBi)	4.59	4.35	4.24



Frequency (MHz)	5150	5250	5350	5450	5550	5650	5750	5850
Efficiency (dB)	-1.10	-1.19	-0.99	-0.96	-0.89	-0.97	-1.06	-1.14
Efficiency (%)	77.7	76.1	79.6	80.2	81.4	79.9	78.4	77.0
Gain (dBi)	5.89	5.73	5.94	5.74	5.35	5.27	5.60	5.22