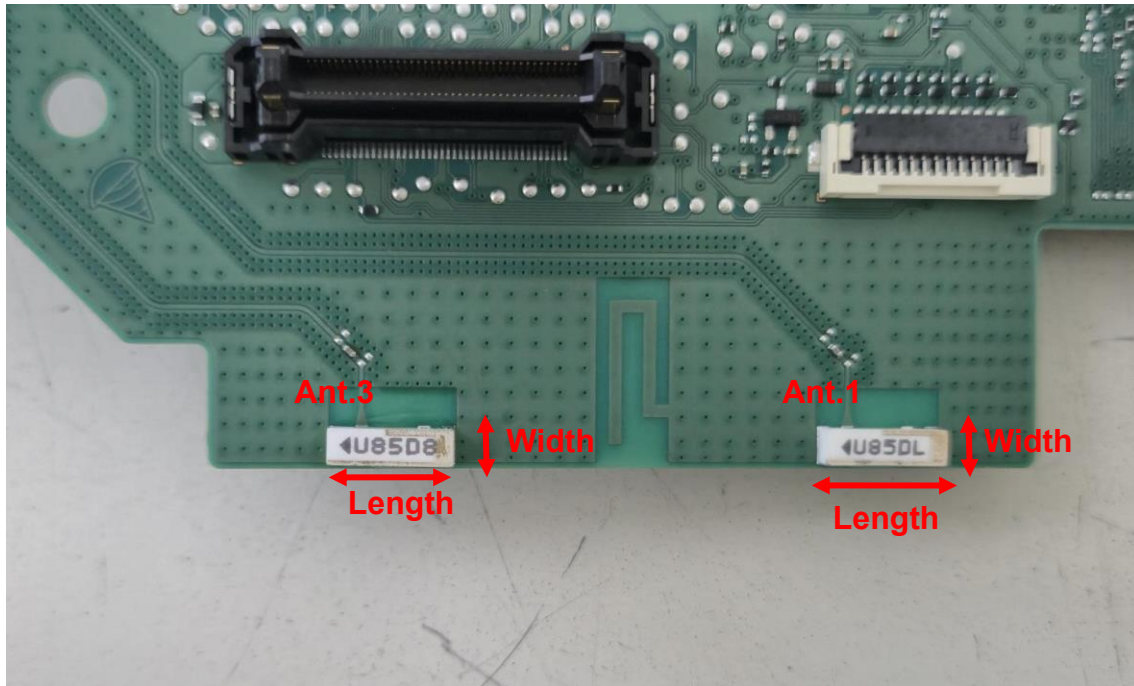


Antenna Information

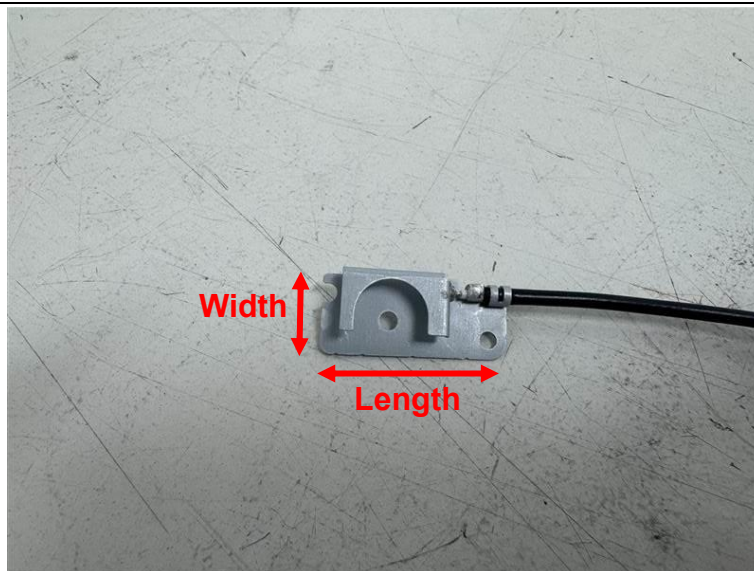
Item	Contents	
Antenna Type	Ant.1 Ant.3	Internal Chip Antenna
	Ant.2	External Metal Antenna
Antenna peak gain	Ant.1	BT: 2 402 MHz ~ 2 480 MHz: 0.33 dBi WLAN5: 5 180 MHz ~ 5 240 MHz: 0.29 dBi 5 745 MHz ~ 5 805 MHz: 0.49 dBi
	Ant.2	WLAN2: 2 412 MHz ~ 2 462 MHz: 3.09 dBi WLAN5: 5 180 MHz ~ 5 240 MHz: 2.95 dBi 5 745 MHz ~ 5 805 MHz: 4.04 dBi
	Ant.3	WLAN2: 2 412 MHz ~ 2 462 MHz: 0.35 dBi WLAN5: 5 180 MHz ~ 5 240 MHz: 0.69 dBi 5 745 MHz ~ 5 805 MHz: 0.85 dBi
Manufacturer / Model name	Ant.1 Ant.3	AMOTECH Co., Ltd. / AMAN1003030ST02
	Ant.2	AUMOVIO Automotive Parts (Suzhou) Co., Ltd. / -
Address of manufacturer	Ant.1 Ant.3	380, Namdongseo-ro, Namdong-gu, Incheon, Republic of Korea.
	Ant.2	North Block, Building 15, GangtianIndustrial Square, No. 99 GangtianRoad, SIP Suzhou, P. R. China 215121.
Test Laboratory	Ant.1 Ant.3	AMOTECH Co., Ltd.
	Ant.2	AUMOVIO Automotive Parts (Suzhou) Co., Ltd.
Internal Chip Antenna (Ant.1 & Ant. 3)	Length	10 mm
	Width	3 mm
External Metal Antenna (Ant. 2)	Length	33 mm
	Width	18 mm

Model name: LANR61

Internal Chip Antenna

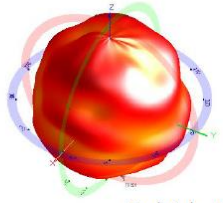
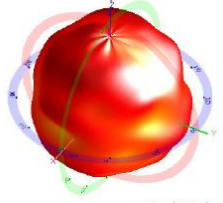
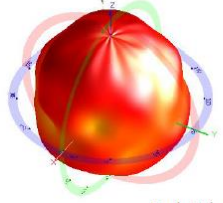
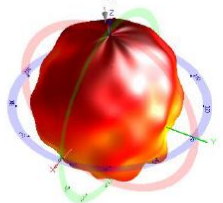
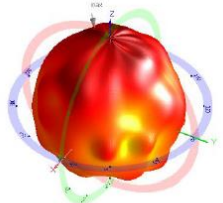
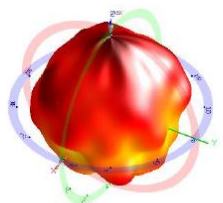


External Metal Antenna

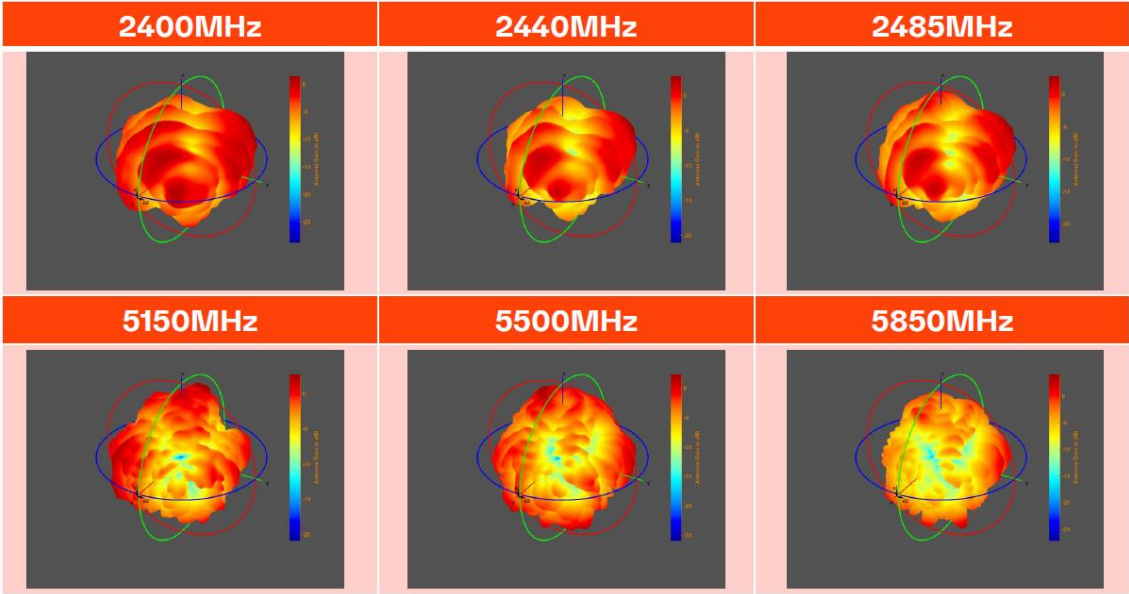


Model name: LANR61

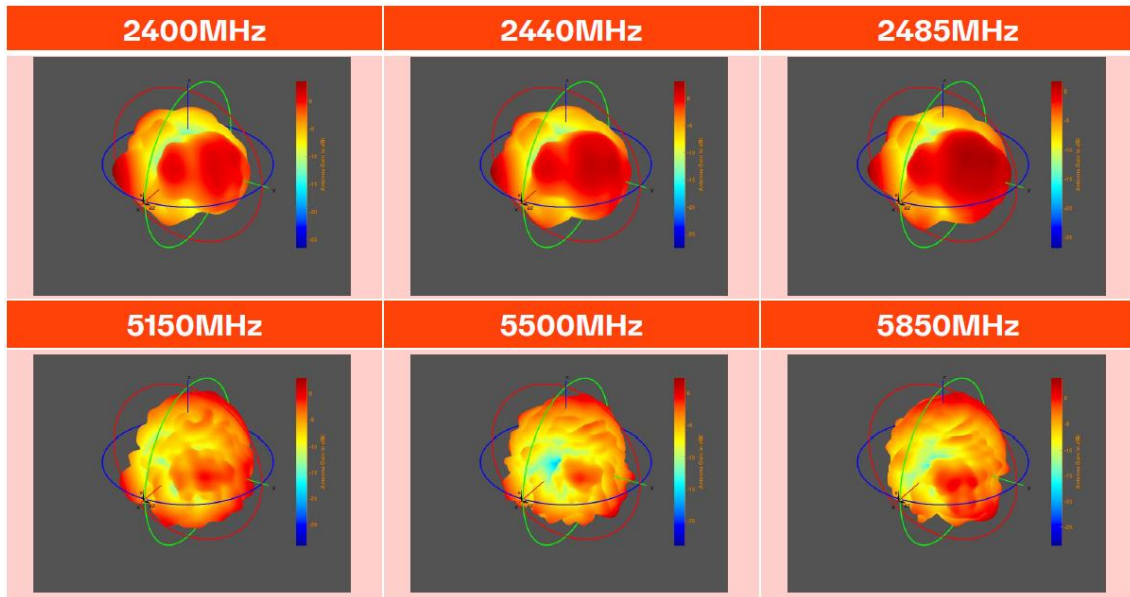
Ant.1

2400MHz	2442MHz	2485MHz
 Peak Gain : 0.25dBi	 Peak Gain : 0.33dBi	 Peak Gain : 0.37dBi
5150MHz	5500MHz	5850MHz
 Peak Gain : 0.29dBi	 Peak Gain : 0.94dBi	 Peak Gain : 0.49dBi

Ant.2



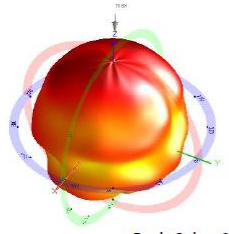
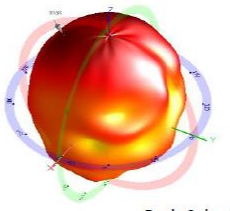
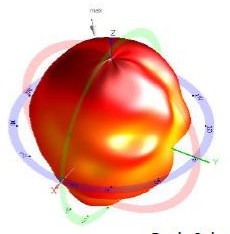
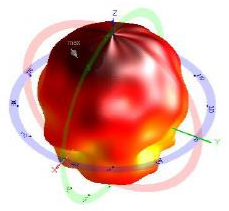
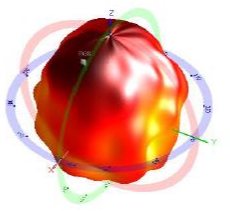
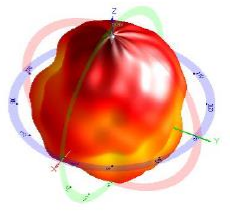
Test Condition	WIFI 2.4 & 5GHz		
Frequency(MHz)	Efficiency(%)	Average gain(dBi)	Peak gain(dBi)
2400	43.20	-3.64	1.39
2440	56.09	-2.51	2.68
2485	54.69	-2.62	2.35
5150	59.15	-2.28	2.72
5500	50.29	-2.98	2.31
5850	45.07	-3.46	4.04



Test Condition	WIFI 2.4 & 5GHz		
Frequency(MHz)	Efficiency(%)	Average gain(dBi)	Peak gain(dBi)
2400	49.38	-3.06	3.52
2440	49.78	-3.02	3.09
2485	38.68	-4.12	1.00
5150	45.62	-3.40	2.95
5500	45.25	-3.44	2.34
5850	49.52	-3.05	3.87

Model name: LANR61

Ant.3

2400MHz	2442MHz	2485MHz
 Peak Gain : 0.38dBi	 Peak Gain : 0.35dBi	 Peak Gain : 0.97dBi
5150MHz	5500MHz	5850MHz
 Peak Gain : 0.69dBi	 Peak Gain : 0.81dBi	 Peak Gain : 0.85dBi