

	GradiANT (Pattern Antenna)	
	MODEL NAME	WR24-GA

WR24-GA

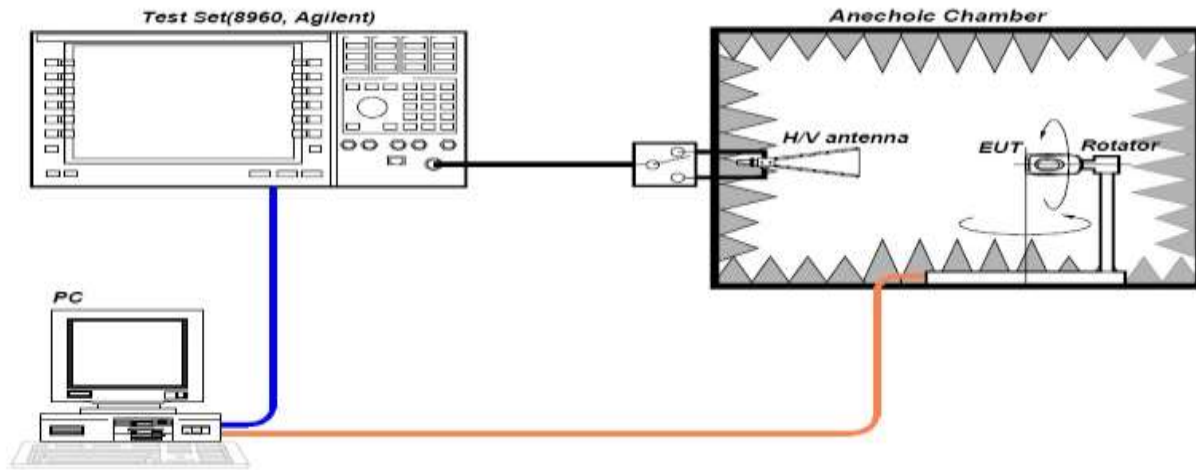
ANT Review Report

Rev01 기구 조립 상태
2024.06.21

1. 안테나 Gain 측정 Set-up

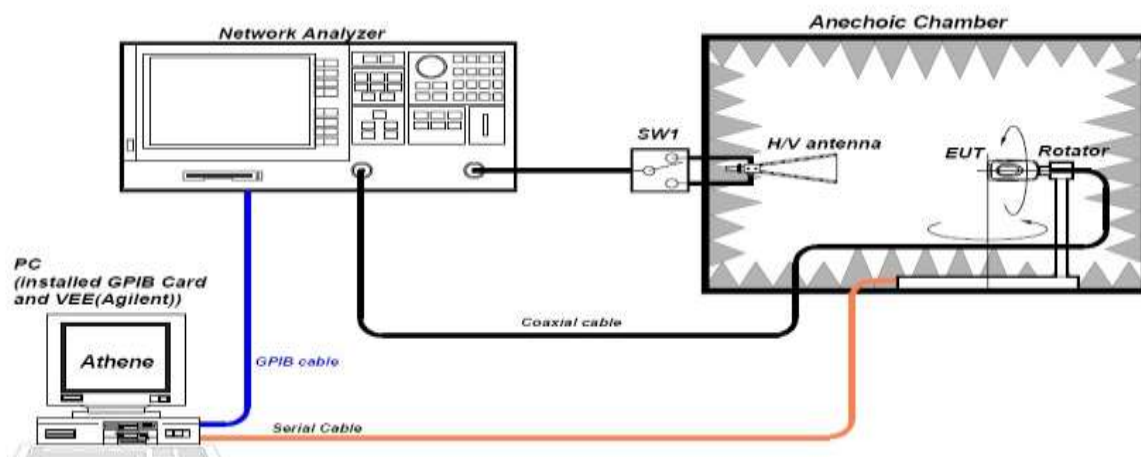
Active test Sysetm

- TRP, NHPRP,UHRP
- TIS, NHPIS, UHIS
- Relative Sensitivity



Passiver test Sysetm

- Efficiency
- Peak Gain, Avg, Gain
- Min, Max PWR



2. 안테나 Gain 측정 장비

2.1 SWR / Return Loss

	Set Condition
Network Analyzer	Agilent 8753ES
Cable	Semi-rigid (40mm, 60mm)
Test condition	

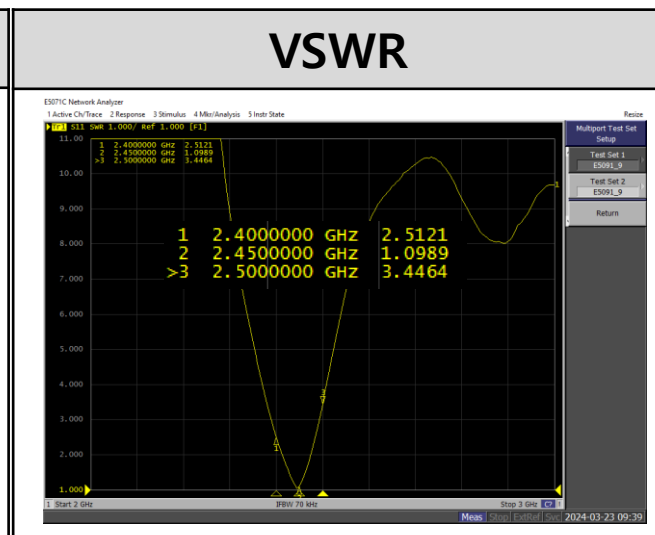
2.2 Gain

Antenna gain is measured in the anechoic chamber of this company.



3. 안테나 Gain 측정 Date : 2024년 06월 21일:

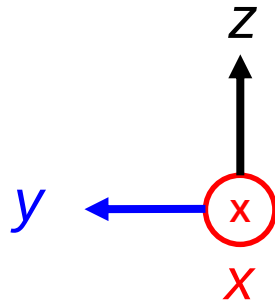
4. 안테나 테스트 진행 담당자 : 이동열 (Lee Dong Youl) 연구실장 (라디나 주식회사)



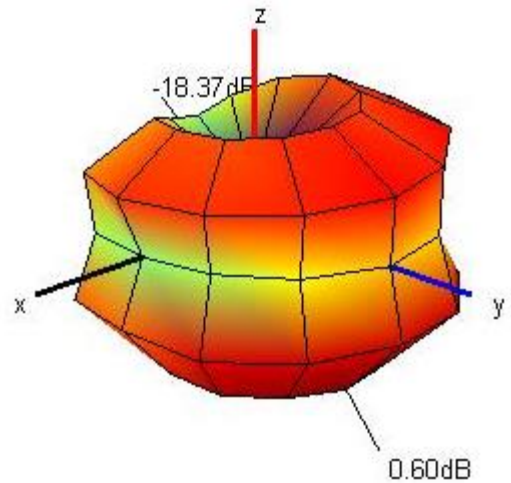
	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18
Frequency [MHz]	2400	2405	2410	2415	2420	2425	2430	2435	2440	2445	2450	2455	2460	2465	2470	2475	2480	2485
Efficiency [dB]	-4.37	-4.27	-4.15	-4.01	-4.01	-3.77	-3.41	-3.23	-3.26	-3.23	-3.31	-3.37	-3.70	-3.88	-3.89	-3.86	-3.78	-4.33
Efficiency [%]	36.6	37.4	38.4	39.7	39.7	41.9	45.6	47.6	47.3	47.5	46.7	46.1	42.6	40.9	40.8	41.1	41.8	36.9
TRG ₀ [dB]	-5.06	-4.91	-4.86	-4.70	-4.70	-4.48	-4.08	-3.94	-3.94	-3.93	-3.99	-4.04	-4.43	-4.62	-4.60	-4.60	-4.56	-5.13
Gain _{0 Peak} [dB]	0.60	0.67	0.86	0.89	0.87	1.05	1.45	1.81	1.50	1.93	1.65	1.75	1.27	1.38	1.34	1.31	1.13	1.04
Gain _{0 Min} [dB]	-32.77	-26.78	-22.09	-22.92	-25.03	-32.85	-27.11	-24.29	-22.44	-20.85	-22.07	-21.46	-20.52	-28.61	-23.34	-17.51	-18.78	-18.34
TRG ₀ [dB]	-12.65	-12.88	-12.42	-12.36	-12.33	-12.00	-11.87	-11.43	-11.62	-11.52	-11.66	-11.77	-11.82	-11.93	-12.11	-11.90	-11.64	-12.08
Gain _{0 Peak} [dB]	-4.79	-5.04	-4.10	-3.78	-4.43	-4.12	-3.33	-3.78	-3.44	-3.57	-3.99	-3.39	-3.81	-3.60	-3.94	-4.12	-3.05	-3.71
Gain _{0 Min} [dB]	-60.20	-33.94	-32.72	-32.19	-38.18	-37.72	-35.20	-32.28	-47.28	-40.26	-37.37	-36.00	-39.68	-33.23	-36.88	-34.17	-36.25	-31.74
Peak Gain [dB]	0.60	0.68	0.88	0.99	0.88	1.19	1.59	1.83	1.63	1.94	1.80	1.75	1.49	1.38	1.50	1.33	1.37	1.04
Directivity [dB]	4.97	4.95	5.03	5.00	4.89	4.97	5.01	5.06	4.89	5.17	5.10	5.12	5.19	5.27	5.39	5.19	5.16	5.37
Minimum Gain [dB]	-18.37	-18.13	-16.11	-16.01	-17.21	-14.95	-15.64	-14.41	-16.48	-14.52	-14.67	-17.62	-16.57	-15.74	-13.62	-15.45	-15.94	-16.14
Average Efficiency	-3.87 dB		41.06 %								Peak Gain		1.94 dBi					

2.2 Radiation Pattern for **WR24_GA (기구 조립품) Tuned**

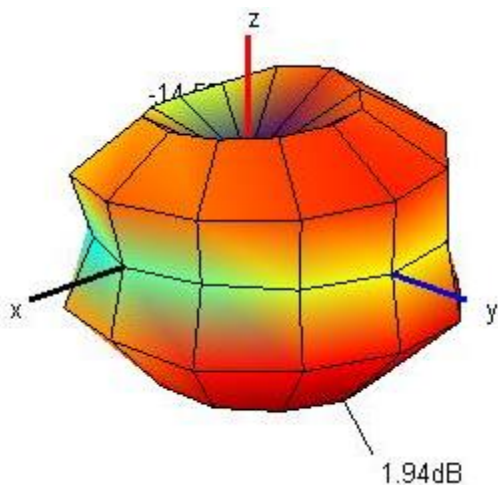
Coordinate



2400 MHz



2445 MHz



2485 MHz

